

THE MAN AND HIS FAMILY

A psychiatric study of background variables
of relevance for the man's mental adaptation
and relations to his wife and child

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To Agneta, Cecilia, Helena and Annika



The thesis is based on the following papers:

- I. Uddenberg, N., Englesson, I. and Nettelbladt, P.: Experience of father and later relations to men. A systematic study of women's relations to their father, their partner and son. Acta Psychiat. Scand, 59, 87-96, 1979.
- II. Nettelbladt, P. and Uddenberg, N.: Sexual dysfunction and sexual satisfaction in 58 married Swedish men. J. Psychosom. Res. 23, 141-147, 1979.
- III. Nettelbladt, P., Uddenberg, N. and Englesson, I.: Father/child relationship: Background factors in the father. Acta Psychiat. Scand. 61, 29-42, 1980.
- IV. Nettelbladt, P., Uddenberg, N. and Englesson, I.: Mental health of 58 Swedish men living together with their wives and preschool children. Acta Psychiat. Scand. 63, 463-478, 1981.
- V. Nettelbladt, P., Uddenberg, N. and Englesson, I.: Sex-role patterns, paternal rearing attitudes and child development in different social classes. Acta Psychiat. Scand. 64, 12-24, 1981.

In the following presentation, these papers will be referred to by Roman numerals. The results are summarized and discussed together with new and unpublished information.

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INTRODUCTION

The man's rôle in the family has been reevaluated during recent years. By introducing various allowances (SOU 1978: 39; Föräldraförsäkring) the Swedish government has sought to involve both the mother and father equally in child-rearing and breadwinning. Although an increased involvement of the father in the child probably will augment his significance for the child's development, we do not know much about factors of relevance for a man's adaptation as husband and father (Nash, 1965; Biller, 1971; Lamb, 1975; Earls, 1976).

Benedek (1959; 1970) discussing the man's adaptation to fatherhood points to the importance of the man's identification with his own father. If the man has negative experiences of his father, a child might reactivate these negative feelings, disturbing his relation to the child and the child's relation to him. Benedek also emphasizes the fact that fatherhood brings out the oedipal situation very clearly. During pregnancy and the post partum period, the wife withdraws her attention from her husband, directing it to herself and the child. If the husband's emotional needs have been insufficiently satisfied during childhood, he may feel frustrated and react with aggression towards his wife and child (Benedek, 1946; 1959; 1970). There are also some anecdotal observations (Zilboorg, 1931; Freeman, 1951; Jarvis, 1962; Wainwright, 1966; Lacoursière, 1972) suggesting that paternal psychopathology during pregnancy may be a reflection of an unresolved oedipal conflict.

These indications that the man's early relationship to his father is of importance for his adaptation to parenthood can be compared to the fact that both psychoanalytic observations (Horney, 1933 a; Deutsch, 1944-45; Benedek, 1959; Rheingold, 1964) and systematic studies (Kline, 1955; Tetlow, 1955;

Markham, 1961; Krüger, 1965; Melges, 1968; Nilsson and Almgren, 1970; Nilsson et al., 1971; Uddenberg, 1974 a; 1976 b; 1980) have shown the woman's relation to her mother to be of specific importance for her adaptation to motherhood. However, no systematic study concerning the importance of the man's relation to his own father for his adaptation to fatherhood is known to the present author. The first purpose of this investigation was to elucidate the relevance of the man's early experiences of his parents, and especially of his father, for his adaptation to parenthood (paper III).

Parents, however, might not only be important for their children's adaptation to parenthood, but also for their children's marital adjustment. In the Midtown-Manhattan study (Langner and Michael, 1963) marital problems were found to be more common when the parents of the spouses were divorced. In a Swedish study, Karlsson (1951) found an association between the marital harmony of spouses and that of their parents. However, Jonsson and Kälvesten (1964) using a similar technique as Karlsson were not able to confirm this finding. Uddenberg (1974 b; 1976 a) demonstrated that a woman's experience of her parents' marriage and in particular her early experiences of her father are connected with her sexual adaptation and relation to men. The second purpose of the present study was to elaborate the findings of Uddenberg (1974 b; 1976 a). Thus, the connection between the woman's early experiences of her parents and her way of relating not only to her partner, but also to her child and especially to her son, is studied (paper I). Further, we have studied to what extent a man's sexual adaptation is influenced by his early experiences of his parents and of the parents' relationship to each other (paper II).

Earlier studies have shown that the man's adult mental health is related both to his early experiences of his parents (Langner and Michael, 1963;

Vaillant, 1974) and to his emotional relationship with his wife and child (Langner and Michael, 1963; Vaillant, 1974; Heath, 1976). The third purpose of the present investigation was to see if these findings could be confirmed.

Many studies (Buck and Laughton, 1959; Kellner, 1963; Hare and Shaw, 1965; Rutter, 1966; Wolff and Acton, 1968; Rutter et al., 1975; Richman, 1975; Rutter et al., 1977) have shown a connection between poor mental health in parents and emotional disturbances in their children. Most of the studies (Buck and Laughton, 1959; Kellner, 1963; Hare and Shaw, 1965; Wolff and Acton, 1968; Rutter et al., 1975; Richman, 1975) suggest that the mental health of the mother is of special relevance in this connection. However, various psychological authors (A. Freud, 1937; Mowrer, 1950; Sears et al., 1957; Kagan, 1958; 1964) consider that the father is of specific significance for the personality development of the pre-school boy. In contrast to a girl, a boy in those years must shift his identification from his mother to his father and thus may be more sensitive than a girl to emotional disturbances in his father. The fourth purpose of the investigation was to study if poor mental health in the father was associated with the emotional and intellectual development of his child. For reasons presented above, special interest was directed towards the boys.

The reevaluation of the man's rôle in the family was initiated by the major socioeconomic changes that took place in Sweden after World War II when the marital rate increased at the same time as more women were demanded on the labour market (Liljeström, 1976). Swedish family policy adapted to this development and since 1974 the mother or the father has had the right to take a "parenthood leave" during the child's first year of life retaining most of their salary. When the outcome of this reform was evaluated (SOU 1978: 39) men in families of a high

socioeconomic level were found to have taken advantage of this opportunity more often than men in families of a low socioeconomic level. The findings indicate that the sex-rôle pattern may be more traditional in the lower classes. Further, many studies (Sears, Maccoby and Levin, 1957; Jonsson and Kälvesten, 1964; Jonsson, 1967; 1969; Kärrby, 1971; Holter et al., 1976) have demonstrated that an "authoritarian" rearing attitude is more common in the working class than in the middle class. The fifth purpose of this study was to investigate sex-rôle patterns and rearing attitudes in the different social classes.

Children of highly educated parents have been found to score higher on various intelligence tests than children of less educated ones (Bayley and Schaeffer, 1960; Bayley, 1967; Kyng, 1974). Also, Kyng (1974) found that children of highly educated mothers tended to be more emotionally and socially mature than children of less educated mothers. The sixth purpose of the present study was to investigate to what extent the child's intellectual and emotional development is related to socioeconomic differences.

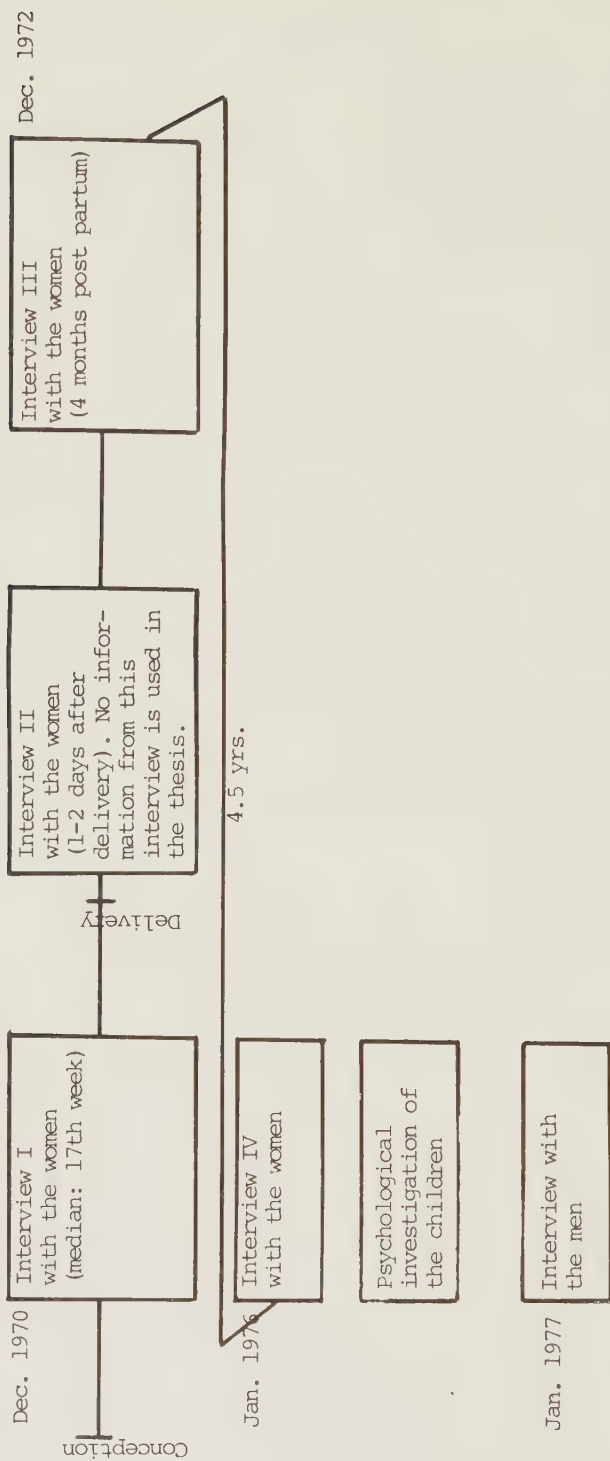
To sum up, the present investigation attempts to elucidate factors of importance for the man's relations to his wife and child. Further, we studied the father's importance for the development of the child. In this connection it should be noted that most researchers studying the relevance of the father for the development of his child either have studied the importance of paternal absence in child development (Bach, 1946; Lynn and Sawrey, 1959; Hetherington, 1966) or based their conclusions about the influence of the father on information collected from the mother (Nash, 1965; Biller, 1971; Lamb, 1975; Earls, 1976). Thus, it is of special interest that the fathers in this investigation were contacted in person.

THE SAMPLE

Selection principles

The present thesis is part of a longitudinal prospective study of the relevance of various psychological and social factors for adaptation to parenthood and parent/child relations. The general design of the study is presented in Figure 1.

6 FIGURE 1. General design of the study.



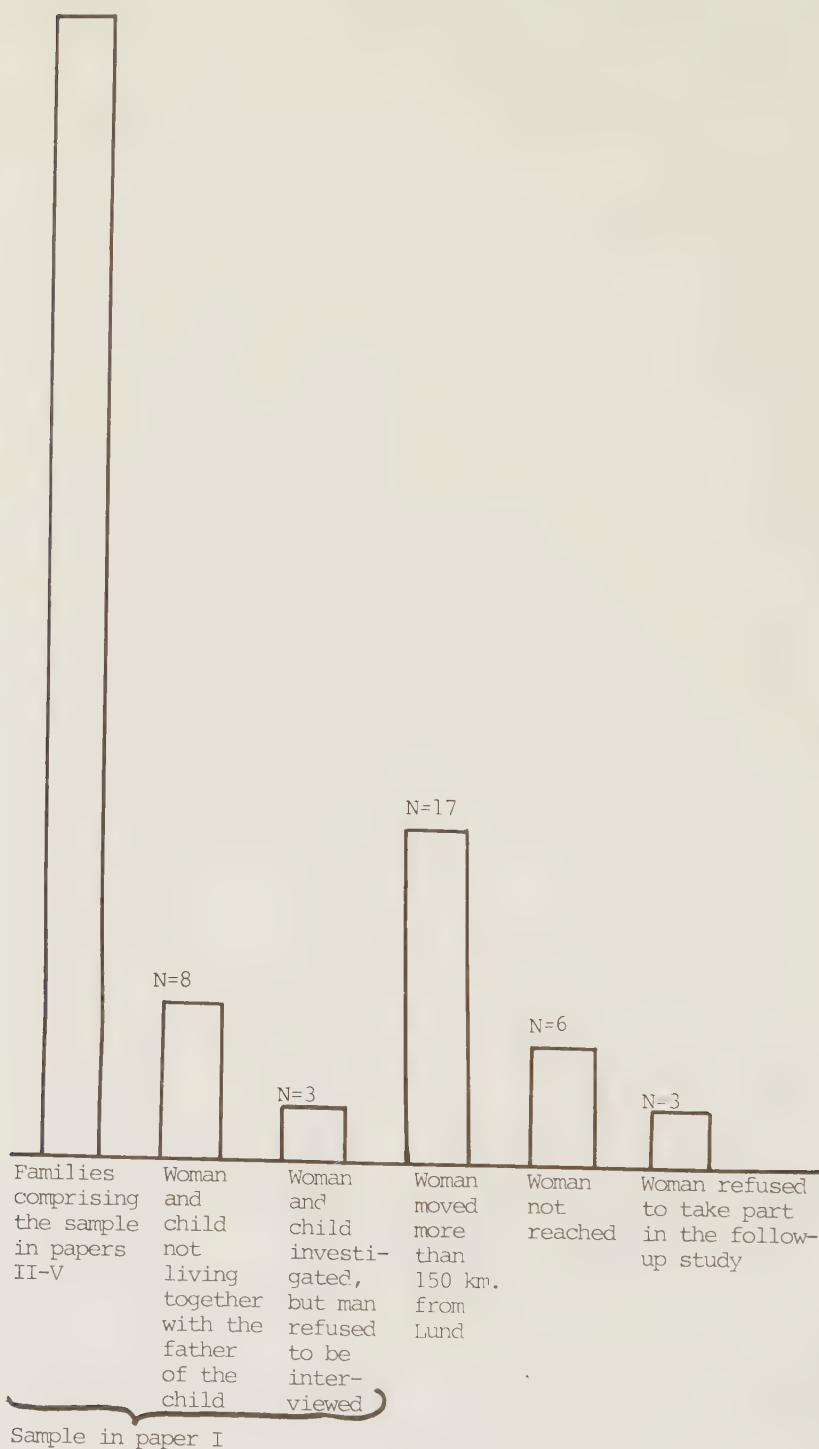
The original study (Uddenberg, 1974 a) was carried out from December 1970 - December 1972 when 101 pregnant nulliparous women were randomly selected from women visiting the ante-natal clinic of Lund, a university town of southern Sweden. Ninety-five of these women were followed by means of semi-structured interviews during the first part of their pregnancy (Interview I), 1 - 2 days after their delivery (Interview II) and four months post partum (Interview III, cf. Figure 1). A detailed description of the interviews is given elsewhere (Uddenberg, 1974 a).

The present study was carried out from January 1976 - January 1977. The women of the original study (Uddenberg, 1974 a) were contacted and requested to take part in the follow-up study. If the woman accepted, she was interviewed in her home by the same investigator (N. U., Interview IV) who had interviewed her previously. While the woman was being interviewed, an independent examination of the pre-school child (I. E.) was carried out in a different room of the home. At the end of the interview the woman was asked if she would allow us to contact her husband. If the woman gave her permission, her husband was contacted for an interview by the present author (P. N., cf. Figure 1).

In the original study (Uddenberg, 1974 a) 95 women were investigated. For economical reasons seventeen of these women were not contacted as they had moved more than 150 km from Lund. Six of the remaining 78 could not be reached and three women refused to take part in the investigation. Thus, 69 mothers and 70 children (in one case the mother gave birth to twins) comprising the sample in paper I were investigated (Figure 2).

N=58

FIGURE 2. Loss of families in the sample (N = 95).



As eight of these women did not live together with the biological father of the child only 61 men were contacted. Three of the men refused to take part in the investigation. Thus, in all 58 men were investigated. These men, their wives and children comprise the sample in papers II - V (Figure 2). A general characteristic of the sample is given in the different papers.

Representativity of the sample

As described above the original sample comprised 95 women, whereas the sample of paper I comprised 69 women and 70 children and in papers II - V 58 families. Most of the loss was due to the fact that the women had moved ($N = 17$) or could not be reached ($N = 6$). Only three of the contacted women and three of the contacted men refused to take part in the investigation (Figure 2).

As the loss of men and women by moving could introduce a systematic sampling error, available data, i. e. the median age and educational level of these men ($N = 17$) and women ($N = 17$) were compared to the median age and educational level of the investigated men ($N = 58$) and women ($N = 69$). No significant differences between the men and women who had moved and the men and women investigated were found in respect of their median age. However, there was an overrepresentation of highly educated men ($N = 15$) and highly ($N = 9$) and moderately ($N = 6$) educated women among those who had moved more than 150 km from Lund. This may have increased the social representativity of the sample, as a high educational level was overrepresented in the original study (Uddenberg, 1974 a). Thus, the sample may be regarded as reasonably representative of the average unbroken family with small children. However, families with severe social difficulties may be somewhat underrepresented.

METHODS

A. The semi-structured interviews

The interviews were semi-structured. This implied that the interviewer followed an interview formula in which the topics to be discussed were listed. The interviewer tried to introduce each topic in a similar way in each case and encouraged the interview subject to talk as freely as possible. When the discussion about a certain topic was finished, the interviewer assigned the subject's answer to one of the previously defined alternatives in the interview formula.

The semi-structured technique permitted the interviewer to obtain relevant information about rather delicate matters such as the man's feeling for his child, his opinion of his marriage etc. Naturally, questions of this nature are not easy to answer. Thus, it was an advantage to have a relatively free discussion after which the interviewer could sum up his impression of the subject's opinion about the topic discussed. However, an inevitable disadvantage with the technique is that the interviewer's own prejudices may influence the assessments. A more detailed discussion of the semi-structured interview technique is given in the original study (Uddenberg, 1974 a). The content of the interviews with the men and women is described in the different papers (I - V).

B. The investigation of the children

The cognitive level of four and half year old children does not permit an ordinary interview. However, children of this age have the ability to describe their experiences in play (Beard, 1973). This has been utilized both for diagnostic purposes and in child therapy (cf. for instance Bene and Anthony, 1957; Harding, 1965).

In the present investigation we used a projective

play session in order to get information about the child's experiences of its family. The child was invited to play with a doll's house, a mother-doll, a father-doll, a doll representing itself and a doll representing a younger sibling if there was any and a number of different situations representing an "ordinary day in the family" were reproduced.

Using both free report and the replies to standardized questions during the play session (free Swedish translations from the Family Relation Test, FRT, Bene and Anthony, 1957), a child psychologist assessed the child's perception of its father and mother, respectively (Uddenberg and Engleson, 1980).

The child's intellectual development was estimated by Raven's Coloured Matrices (Raven, 1966) and by subtests from the Swedish version of the Terman-Merrill Intelligence Test (Terman and Merrill, 1947). The child's social maturity was assessed in a standardized way (papers IV and V).

Statistical methods

The data were coded and transferred to punched cards for statistical treatment. The statistical analysis was made by comparing the distribution of one variable with the distribution of other variables recorded. As the variables studied constitute ordinal scales, non-parametric statistical methods were used. Thus, the statistical significance of the observed distributions was estimated by calculating χ^2 -values mainly on four-field tables. Yates' correction for discontinuity was employed when any expected value was less than 5. When the total number of individuals was particularly low, Fisher's exact probability was calculated (Siegel, 1956). χ^2 on regression (χ^2_R , Maxwell, 1961) was calculated on six-field tables when the statistical significance of a pervading trend in the distribution was to be tested. A distribution is considered statistically significant when the probability that it is caused by chance is less than 5 % (two-tailed test). Level of concordance was

estimated by calculating tetrachoric correlations, Φ -values, on four-field tables (Siegel, 1956).

Because of the large number of comparisons made, some of the statistical significances obtained may be due to chance only. Thus, the conclusions were based upon several statistically significant observations. Generally, little importance was attached to an isolated statistically significant distribution.

RESULTS

In paper I the woman's relations to her father, partner and son were studied. The design of this study is longitudinal and prospective as information from the original study (Uddenberg, 1974 a) was compared with data from the follow-up study.

When the woman's early experiences of her parents and the quality of her partner relationship as described in interviews I, III and IV (cf. Figure 1) were compared, a report of a poor partner relationship was found to be more common among women reporting poor early emotional relations to their father than among those reporting good relations. However, the woman's report of her early experiences of her mother was only weakly associated with her report of the quality of her relationship to her partner during the period studied.

The woman's attitude towards her child in both interview III and IV more often tended to be connected with her early experiences of her father when the child was a boy than when the child was a girl. Also, the boy's, but not the girl's perception of his of her mother was significantly related to the mother's report of her early emotional relations to her own father.

Further, when the woman's early emotional relationship to her mother and father, respectively, was compared to her attitude towards her son, the

woman's attitude towards her son in interview IV, but not in interview III, was to a greater extent connected with her early paternal than her early maternal contact. Also, the son's description of his mother in the projective play session was significantly linked to the woman's report of her early contact with her own father, but not with the woman's report of her early contact with her own mother. Thus, when the boy was $4 \frac{1}{2}$ years old, the information from both mother and son indicated that mother/son interaction was more connected with the mother's experience of her father than with her experience of her mother.

In paper II the man's sexual function together with his wife and the sexual satisfaction of the man and his wife were studied. The man's sexual functioning was investigated by asking him if he had experienced premature ejaculation, retarded ejaculation or impotence. In order to estimate how incapacitated the man had been, he was asked whether the dysfunction occurred often (≈ 50 % of the coitions), rather often (≈ 33 % of the coitions), seldom (≈ 10 % of the coitions) or never (≈ 0 % of the coitions). Premature ejaculation (Kaplan, 1974) was noted when the man reported that he often (12 men) or rather often (10 men) during coitus could not control ejaculation and consequently reached orgasm too fast. Retarded ejaculation (Marmor, 1975) was registered when the man reported difficulties or inability to achieve ejaculation during coitus often (1 man), rather often (1 man) or seldom (4 men). Impotence (Kaplan, 1974) was noted when the man reported inability to achieve a quality of erection sufficient to enable him to penetrate the vagina often (2 men), rather often (0 men) or seldom (2 men). Dysfunction that had occurred only in connection with a large intake of alcohol was not registered.

The sexual satisfaction of the man and his wife was estimated by asking the man about his own and his wife's sexual satisfaction, how often his wife

reached orgasm and the average coital frequency during the last year. This information was combined in a homogenous scale denoted "Sexual satisfaction of the couple".

Sexual dysfunction as defined above was found in 23 of the investigated men (40 % of the total sample). 22 of these (39 % of the total sample) had experienced premature ejaculation, 6 (10 % of the total sample) retarded ejaculation and 4 (7 % of the total sample) impotence. These frequencies tally rather well with the few population-based studies discussing the matter (Schnabl, 1975; Frank et al., 1978). Other data about the men's sexual behaviour such as median age at first coitus (18 yr), number of sexual partners (median = 4) and average coital frequency (median = 1/week) were similar to the observations made by Zetterberg (1969) in his Swedish population poll study.

Sexually dysfunctional men more often than others reported that their early contact with their father had been poor and that their mother had been dominating. The sexual satisfaction of the couple, however, was not associated with the man's report about his early experiences of his parents, but with his relations to his wife and child. Also, the man's sexual functioning was not connected with the sexual satisfaction of the couple. One explanation might be that occasional sexual dysfunction does not interfere with sexual satisfaction. Further, perfect sexual functioning does not warrant that the intercourse is gratifying from an emotional point of view. The different psychological background of male sexual dysfunction and sexual satisfaction can be compared to similar findings in a study on women (Uddenberg, 1974 b). In this study orgasmic dysfunction was found to be related to the woman's early parental relations, whereas the woman's sexual satisfaction was related to her partner relationship.

In paper III background factors in the man of

possible importance for the father/child relationship were studied. The dependent variable was a global assessment of the man's experience of his child as either predominantly positive or negative. It was taken for granted that the child meant both positive and negative things for the man and it was only when negative feelings were prominent that the man's experience of his child was estimated as negative. "Non-authoritarianism", intimacy and a more active participation in the care of the child were related to a positive experience. The man's experience of his preschool child was also associated with his child's experience of him as estimated in the projective play session. It was, however, not related to the child's experience of its mother. Thus, the man's experience of his child seems to be a rather specific, comprehensive and relevant measure of the father/child relationship.

Men reporting poor early parental contact were less positive towards their child than others. The man's experience of his preschool child was more connected with his early experiences of his father than of his mother, especially when the child was a boy. Men "positive" to their child more often described their relationship to their wife as good. A low income and job dissatisfaction were overrepresented in men "negative" to their child.

In paper IV the mental health of the men was studied. Men with mental symptoms above an approximate median were compared to men with mental symptoms below the median. Naturally, a number of mental symptoms above the median is not equivalent to being incapacitated by poor mental health. Only fourteen men (24 % of the total sample) were considered to suffer from psychopathology of any clinical significance. Thirteen of these men reported mental symptoms above the median. Schizophrenia was diagnosed in one man (1.7 % of the total sample). Seven men (12 % of the total sample) reported moderate depres-

sive symptoms such as lowered mood, anxiety and impaired working capacity. Three men (5 % of the total sample) reported anxiety-phobic reactions. Four men (7 % of the total sample), one of whom also reported moderate depressive symptoms, had alcoholic problems. None of the men were judged to be addicted to sedatives. The frequencies of mental disorder in our study tally rather well with those expected in an unselected Swedish normal population (Kringlen, 1980).

Men with mental symptoms above the median more often than others had suffered from poor mental health in childhood and adolescence. The same men also more often than others reported poor contact with both their father and mother during their formative years and considered the marriage of their parents to have been disharmonious. Men with many mental symptoms more often than others tended to describe a less satisfying relationship to their wife and child. The same group of men also had a lower income and tended to be dissatisfied with their job and present dwelling. There was no relationship between the man's number of mental symptoms and the child's report of its emotional contact with its father in the projective play session.

In paper V sex-rôle patterns, rearing attitude and the child's intellectual and emotional development in different social classes were studied. It was found that working class men and women were younger when they married and that working class women more often than others were house-wives. Working class men more often than others had been reared in an "authoritarian" way and more often reared their children in this way. Upper middle class men had participated more actively in the care of the child. Working class children scored lower on the intelligence tests, especially the verbal ones and were more often estimated to be socially immature.

GENERAL DISCUSSION AND CONCLUSIONS

The findings of the present study strongly underline the relevance of early parental relations for the emotional adjustment of both men and women in adult life. As in other population studies (Langner and Michael, 1963; Vaillant, 1974) we observed that, as regards men, poor relationships to the parents during the formative years were associated with poor mental health in adulthood (paper IV). Although a man's early experiences of both his parents might be of importance for his later emotional adjustment, our findings (paper II and III) indicate a specific significance of the man's relationship to his father. In paper II, we observed that male sexual dysfunction was strongly connected with poor contact with the father and also to some extent with the experience of the mother as dominant. In paper III, we demonstrated that a man's early relationship to his father was more strongly connected with his experience of his child than his early relationship to his mother.

As regards women, we found that a woman's way of relating both to her partner (A) and to her son (B) was more strongly connected with her report of her early paternal contact than with her report of her early maternal contact (paper I). The first of these findings (A) can be compared to the observations that poor sexual adaptation (Terman, 1951; Fisher, 1973; Uddenberg, 1974 b) and less satisfying partner relationships (Uddenberg, 1976 a) have been associated with the woman's report of negative early experiences of her father. The second of these findings (B) is a counterpart to the observations that the mother/daughter relation has been found to be more connected with a woman's early experiences of her mother than of her father (Shereshefsky and Yarrow, 1973; Uddenberg and Englessen, 1980). Taken together, the findings in paper I suggest that the woman's early experiences of her father have a specific signifi-

cance for her later relations to men.

Consequently, it was of interest to study if the man's relationship to his wife was more strongly connected with his early experiences of his mother than of his father. In the present study this was not the case. There was no association between the man's description of his mother and that of his wife.

However, when men giving a negative description of their wife ($N = 7$) were compared to those giving a positive or ambivalent description ($N = 51$) with respect to their early experiences of their parents, there was a tendency that negative men more often than positive or ambivalent ones reported a poor childhood contact with their father (Table 1). This finding indicates in a similar way as our findings regarding sexual dysfunction (paper II) that a man's early experiences of his father, may be important for his masculine identity and consequently for his way of relating to women.

Uddenberg (1974 b; 1976 a) has also demonstrated that a woman's early experiences of the marriage of her parents are connected with her later relations to men. When a man's description of his wife was compared to his report about the marriage of his parents, there was only a weak tendency for men describing their wife in a negative way to report the marriage of their own parents as having been disharmonious (Table 1). Thus, in contrast to the findings regarding women it was not possible to demonstrate that the man's early experiences of the opposite-sexed parent or his experiences of the marriage of his parents were of specific significance for his partner relationship.

TABLE 1. Comparisons between the man's description of his wife and his report of the emotional relations in his parental family (N = 58).

		Wife described		Level of signifi- cance
		Pos./Amb. N=51	Neg. N=7	
<u>Man's father:</u>				
Contact with father in childhood				
	good	34	2	p=0.11
	poor	17	5	
Contact with father in adolescence				
	good	31	4	p=0.61
	poor	20	3	
<u>Man's mother:</u>				
Contact with mother in childhood				
	good	38	4	p=0.42
	poor	13	3	
Contact with mother in adolescence				
	good	29	4	p=0.62
	poor	22	3	
<u>Parental marriage:</u>				
Marriage of own parents				
	harmonious	9	3	p=0.25
	disharmonious	42	4	

However, the rather weak associations between the man's description of his wife and his report of his early experiences of his parents and of their marriage might be due to the skewness of the distribution (7 "negative" men were compared to 51 "ambivalent/positive" men, Table 1). Further, it is the impression of the interviewer (P. N.) that many of the men found it difficult to describe their wife in a nuanced way (Jonsson and Kälvesten (1964) had the same impression in their investigation of 222 Stockholm boys). Possibly, some of the men describing their wife in a positive way may have been dissimulating and thus incorrectly assessed as positive.

In paper I we demonstrated that a woman's early experiences of her father were of specific significance for her later relations to her son. In paper III, it was demonstrated that a man's early experiences of his father were more connected with his experience of his child when the child was a boy than when it was a girl. Probably, a boy may reactivate a man's problems in relation to his own father.

Thus, the findings in papers I, II and III emphasize the rôle the parents play as models during the formative years for the later family adaptation of both men and women. From its experiences of its parents the child establishes an inner model of what a parent or a spouse is. When the child grows up, marries and becomes a parent itself the internalized image of the parents will influence the relationship both to the child and the spouse. If the man or woman have had negative experiences of their own parents, the child or the spouse may reactivate unresolved earlier relational problems.

Poor contact with and access to the father and domination by the mother were associated with sexual dysfunction (paper II). Perhaps, this may be interpreted as an expression of a poor masculine identification. To quote Biller (1971); who in his review of different theories of masculine identification

emphasizes the similarities between the hypotheses derived from these theories: "The hypotheses stress the importance of the father/son relationship and the boy's imitating his father, although with different emphases: Freudian theory, the father as punitive and threatening, status-envy theory, the father as the primary consumer of resources, learning theory, the father as rewarding and affectionate; role theory, the father as the principal rewarding and punitive agent; social power theory, the father as the primary controller of resources. From each of these theories, it can be predicted that if the father was absent, or if the mother was more dominant than the father, the young boy would experience difficulties in the masculine development process".

Some of our findings (papers I, III and V) could be explained in terms of "psychological heredity". Uddenberg (1974 a) observed a parallellism in reproductive behaviour between mother and daughter and pointed to the similarities between "psychological" and "social" heredity as described by Jonsson (1967). However, Uddenberg (1974 a) proposed that the transmission of inadequate adaptational patterns was partly due to identification with an inappropriate model. Our finding that the man's early experiences of his father were parallellized in his relation to his son (paper III) may be interpreted in terms of identification. Also, the findings that working class men more often than others had been reared in an "authoritarian" way and that they in their turn reared their children in the same way (paper V), may illustrate this.

The present study as well as those cited (Jonsson, 1967; Uddenberg, 1974 a) give evidence that

"psychological" or "social" heredity may be an important factor when we try to understand the family adaptation of the individual. However, the explicatory value of "psychological" or "social" heredity is by no means total. For instance, genetic inheritance might also contribute to the individual's behaviour. The design of the present study does not allow us to decide to what extent environment or heredity contribute to our findings. Also, negative experiences during the individual's formative years do not necessarily predestinate to adult mental illness or maladjustment. Rather, if the individual has the capacity to cope with psychological stress in a creative way, this may even promote his or her development.

According to many theorists (A. Freud, 1937; Mowrer, 1950; Sears et al., 1957; Kagan, 1958; 1964; 1971) a child, and especially a boy, begins to orient its actions away from its mother and toward its father sometime between the ages of 3 to 6 years old. Consequently, the boy in this period might be more sensitive to emotional disturbances in the father than the girl who does not need to change her object of identification. It was hypothesized that in our study the boys more than the girls should be affected by poor mental health in the father (paper IV) or disturbances in the father/child relationship. However, this hypothesis was not borne out: When the boys and the girls in the sample were studied separately, no associations between a man's mental health and the development of his son or his daughter were found. Neither was the son's, nor the daughter's perception of his or her father connected with the father's current mental health. On the other hand, the father's mental health is not a measure of the quality of the father/child relationship. Other studies (Payne and Mussen, 1956; Mussen and Distler, 1959; Mussen and Rutherford, 1963; Rutter, 1977) done on older boys than those investigated by us demonstrate that the quality of the father/child rela-

tionship is an important factor for the boy's development and identification with his father.

In our study (Uddenberg, 1980) the quality of the mother/child relationship was found to be associated with the child's development. By using information both from the mother and the child it was possible to describe three different patterns of mother/child relationships. When the mother described that she could influence her child sufficiently to satisfy her own needs at the same time as the child in the doll play session perceived the mother as warm, the mother/child relationship was characterized as "WS" (warm and strong). When, however, the mother could influence her child and satisfy her own needs, but was perceived by her child as cold the mother/child relationship was characterized as "CS" (cold and strong). The mother/child relationship in the third group "S" (submissive) was characterized by a submissive mother whom the child perceived as either warm or cold. Children in the "WS"-group more often than children in the "CS"- and "S"- group were estimated as socially mature and scored higher on Raven's Coloured Matrices. The findings are consistent with other investigations (Bowlby, 1951; Baumrind, 1967; Rutter, 1972; Kyng, 1974) considering the mother/child relationship as one of the most important factors determining the child's development.

However, when the same patterns of father/child relationships ("WS", "CS" and "S") were related to the child's development, no associations between any of those patterns and the child's intellectual development or social maturity were found (Table 2). Also, when the boys and the girls in the sample were studied separately, none of the father/child relationship patterns were connected with the boy's or the girl's intellectual or social maturity. Thus, our findings indicate that in our culture the mother's influence on the child's development during its preschool years is greater than that of the

father. Also, a father's influence on the development of his son, which is considered to be of a specific importance in these years (A. Freud, 1937; Mowrer, 1950; Sears et al., 1957; Kagan, 1958; 1964; 1971), did not seem to be greater than his influence on the development of his daughter. Perhaps, the father's importance for the development of his son increases as the boy grows older. Further, the social setting in which the child is reared is of great importance. Even if the Swedish father has become more involved in his child, it is still the mother who has the primary responsibility for the child during its first years of life.

TABLE 2. Comparisons between different father/child relationships and the child's intelligence development and social maturity (N = 58).

	Father/child relationship			
	Warm and strong	Submissive	Cold and strong	Level of significance
	N=22	N=12	N=24	
<u>Intellectual development of the child:</u>				
Raven's coloured matrices				
> median	8	6	11	$\chi^2=0.71$, 2 d.f., N. S.
< median	14	6	13	
Spatial ability*				
> median	9	6	10	$\chi^2=0.30$, 2 d.f., N. S.
< median	13	6	14	
Picture naming*				
> median	13	7	10	$\chi^2=1.66$, 2 d.f., N. S.
< median	9	5	14	
Vocabulary*				
> median	11	4	12	$\chi^2=1.06$, 2 d.f., N. S.
< median	11	8	12	
<u>Social maturity:</u>				
Child estimated as				
mature	11	6	14	$\chi^2=0.39$, 2 d.f., N. S.
immature	11	6	10	

* Subtest from the Swedish version of the Terman-Merrill Intelligence Test (Terman-Merrill, 1947).

However, the more the father participates in the care of the child during its first years, the more impact he will have on his child's development. In this connection it is of interest that social attachment studies (Schaffer and Emerson, 1964; Pedersen and Robson, 1969; Jalmert, 1979) have shown that the father/infant relationship may be of greater significance than previous research would suggest. In a study, largely based upon a Scottish working class sample, Schaffer and Emerson (1964) found that not only mothers, but also fathers, grandparents and siblings may be important attachment objects for the infant. Pedersen and Robson (1969) studying an American middle class sample found that attachment in boys, but not in girls, was correlated to the father's engagement in his infant. In the present study (paper III) a high degree of early paternal caretaking was related to a positive experience of the four and half year old child. This finding corresponds to the observation (SOU 1976: 71) that fathers actively taking part in the care of the child more often than others describe their contact with the child as positive.

In paper V social class differences were discussed. Working class men and women were younger when the child was born. Working class women to a lesser degree than middle class women had worked outside the home since the birth of the child. Upper middle class men had participated more in the care of the child and reported having more interests in common with their wives. These observations are in line with the observations of other investigators (Eskola, 1960; Gavron, 1966; Nordhoek and Smith, 1972; Holter et al., 1976; SOU 1978: 39) that sex rôle patterns are more traditional in the working class. Middle class parents, probably because of their higher educational level, may be more prone to modify their sex rôle behaviour in accordance with modern ideas about the family responsibilities of men and

women.

We could also confirm the findings of other investigators (Sears, Maccoby and Levin, 1957; Jonsson and Kälvesten, 1964; Jonsson, 1967; 1969; Kärrby, 1971; Holter et al., 1976) that working class men more often than others had been reared in an authoritarian way and that they in their turn reared their children in the same way. Differences in child-rearing patterns have been attributed to differences in the goal of socialization between the working class and the middle class. Thus, an authoritarian way of rearing might be looked upon as a realistic goal in socialization when a worker must submit to an authority or has few possibilities of exerting influence upon the character of his work (Kohn, 1969; Holter et al., 1976; Diderichsen, 1977; Huch, 1977). In contrast, middle class jobs give the employee greater possibilities to control his working conditions. Accordingly, it is appropriate for middle class parents to utilize rearing methods that encourage autonomy in their children.

According to Bernstein (1971) certain environmental conditions accompanying different social class levels will be reflected in the language. Lower class families tend to use a "restricted speech code", whereas middle class families tend to use an "elaborated speech code". This means that lower class families use a less complicated language as compared to middle class families. Our finding that working class children scored lower than middle class children on the verbal tests are consistent with Bernstein's observations. In a similar way as the social class determined differences in the rearing attitudes discussed above, the child's acquisition of language might also be attributed to differences in the working conditions of the classes. Obviously, communicative skills will be more useful in middle class jobs than in working class jobs.

Piaget (1971; Beard, 1973) views the child's de-

velopment as a creative interaction between the organism and different factors in the environment. In the present study a high paternal socioeconomic status and a warm and strong mother/child relationship were environmental factors which seemed to promote the development of the young child. Other factors studied by us such as poor mental health in the father or the quality of the father/child relationship were not associated with the development of the child. Naturally, this does not mean that the father's importance for the development of his child during its first years can be neglected. The child who experiences both positive fathering and positive mothering will have greater possibilities to develop in a harmonious way. However, the present study indicates that the impact of the father on the development of the child during its early preschool years in general was not as strong as the impact of the mother.

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APPENDIX: Papers I - V

Experience of father and later relations to men

A SYSTEMATIC STUDY OF WOMEN'S RELATIONS TO THEIR FATHER, THEIR PARTNER AND THEIR SON

N. UDDENBERG, I. ENGLESSON AND P. NETTELBLADT

Using data from a longitudinal, prospective study of 69 women, their partners and first-born children, the woman's description of her parents was compared with her report about her relationships to her partner and child. Information was independently collected from partner and child. The woman's way of relating both to her partner and to her son was more strongly connected with her report about her early paternal than with her report about her early maternal contact. The woman's experience of her father was related to her way of interacting with her child in the case of a son but not in the case of a daughter. Thus, the specific importance of a woman's image of her father for her way of relating to other significant males was emphasized.

Key words: Parent-child relations – marital relations – longitudinal study.

During the course of her life, a woman often establishes intimate and personal relationships with men belonging to three generations. She usually grows up together with her father, later she may have a husband and, if she becomes a parent, a son. Father, husband and son all have one basic quality in common; they are male. Hence it may be suspected that a woman's relationship to her father, her husband and her son have certain properties in common. For instance, the woman's image of her father may influence her way of establishing relationships with other men, e.g. male partners and sons, later in life.

Obviously, poor emotional relations to the parents may have *general* adverse effects on the individual's emotional maturation (e.g. *Langner & Michael* (1963)). In this paper we will, however, disregard this and focus upon the *specific* importance of the relationship to the father for a woman's later relations to men. For instance, we will investigate if it is the woman's experience of her father rather than her experience of the mother which exerts the stronger influence on her relationship to her male partner. Further, we will study whether the woman's experience of her father is more strongly related to her way of interacting with her son than with her way of interacting with her daughter.

Although there is a lot of clinical evidence that a woman's experience of her father is connected with her way of relating to men later in life, few systematic studies have been carried out. *Terman* (1951) and *Fisher* (1973) both presented statistical evidence that women reporting poor sexual responsiveness had often

perceived their father in a negative way. This observation was confirmed by Uddenberg (1974b). In another paper (Uddenberg (1976)) we noted that women who had grown up in a family characterized by poor interparental relations often described their father in a negative way and had often difficulties in establishing stable and gratifying relationships with men. These findings were interpreted by suggesting that the woman had assimilated her parents' negative patterns of interacting, which she repeated in her later relationship to her partner.

As far as we know there are no systematic studies comparing the woman's experience of her father to her way of relating to her son. Obviously, however, the sex of the child is of great importance for the nature of the mother-child relationship. Shereshefsky & Yarrow (1973) observed stronger relationships between "maternal personality dimensions" and behaviour to the baby in the case of a baby girl than in the case of a baby boy, and concluded that the woman "learns how to be a mother to a baby girl by her own experience of being mothered" and that any conflicts connected with her own relation to her mother may be repeated in her way of behaving towards her own baby girl. However, it is also essential to consider the importance that the woman's previous experiences of men, e.g. the father, may have for her way of interacting with her son.

This paper is part of a prospective longitudinal study of women expecting their first child. In semi-structured interviews they described, among other things, their early paternal relations and their present relations to the father of the child. Results from this study have been published previously (e.g. Uddenberg (1974a)). Some years later a follow-up study was carried out. This included an interview with the woman herself and an interview, by another investigator, with her partner. Further, the 4½-year-old child's experience of its parents was investigated in a projective play session.

By statistically analyzing the data from the interviews and the play session it was possible to compare the woman's experience of and attitude towards three generations of men: her father, her partner and her son. Further, her way of relating to her partner and her son could be studied from the viewpoints of the man and of the child.

MATERIAL AND METHODS

General design of the study

The present paper is based upon a longitudinal, prospective study of the relevance of various psychological and social factors for adaptation to parenthood and parent-child relations. In 1971, 101 pregnant nulliparous women were randomly selected from women visiting the ante-natal clinic of Lund, a university town in southern Sweden (Uddenberg (1974a)). In a series of semi-structured interviews 95 of these women were followed through their first pregnancy and puerperium. The first interview (Interview I) was carried out during the first part of the pregnancy (median: 17th week), the second one (Interview II; no information used in the present paper) 1 or 2 days after the delivery and the third (Interview III) 4 months post partum.

Four and a half years later (in 1976) the investigator tried to contact the 78 families who had not moved too far from Lund. Six women could not be reached, and three refused to co-operate, but the remaining 69 mothers were interviewed (Interview IV) and included in the present study. The interview was carried out by the same investigator (N.U.) who had interviewed the women previously. In a projective play

session with a child psychologist (I.E.), who was totally ignorant of the mother's previous and present history, the child yielded information about its perception of the parents.

Sixty-two women were living with the father of the child. In these cases the man was asked to participate in the study. As three men refused to co-operate and one was excluded for other reasons (acquaintance with the investigator) 58 men were interviewed. This interview was carried out by a third investigator (P.N.), who had no information from the other two investigators.

Methods of investigation and variables used

All information from the woman was collected in semi-structured interviews (Uddenberg (1974a)). *Early parental contact* was discussed in Interview I. The woman was questioned about her contact with each parent during childhood and adolescence. As the concept of contact is somewhat ambiguous some clarifications may be necessary. Good contact with the father was registered, when the woman reported that she had felt emotionally supported by her father, to whom she had felt close and could be open. In contrast, poor contact was noted when the woman had experienced her father as distant or even hostile and had received little emotional support from him. The report of occasional conflicts (e.g. as part of the liberation process during puberty) was not taken to indicate poor contact if the antagonism had not been protracted. The relationship to the mother was scored in the same way as that to the father. By these criteria poor early emotional relations to the father were noted for 27 and poor emotional relations to the mother for 29 women. Women reporting poor early relations to one parent also tended to report poor relations to the other ($\chi^2 = 11.05$; $P < 0.001$, $\Phi = 0.40$).

Obviously, any classification of early parent-child relationship as either good or poor implies an immense over-simplification. Even if a relationship was unsatisfactory in many respects this does not exclude the possibility of it having been stimulating and even gratifying in other ways. Further, retrospective reports are always more or less unreliable. However, it seems probable that the women who were classed as having had unsatisfactory emotional relations to their father in general had experienced their relationship to their father as more problematic than the rest of the women.

The women's *partner relations* were studied in all the interviews (I, III, IV). In most cases the woman characterized her partner positively and reported a close and satisfying relationship to him. In these cases the partner relationship was classified as being "very good". Other women, however, described their partner more or less negatively, reporting that they received little support from him or that there were frequent and protracted conflicts. In these cases the partner relation was scored as "not very good". The report of occasional differences of opinion or occasional quarrels was not considered to indicate poor partner relations.

The *man's attitude towards his wife* was studied (by P.N.) at the time of the follow-up investigation. The interview technique and classification criteria were basically the same as in the interview of the woman.

In both Interview III and Interview IV much interest was focused upon the woman's perception of her child. It was considered natural for the mother to have both negative and positive feelings towards her child. In spite of this, the interviewer tried to estimate the *mother's general attitude towards her child*, that is if her description was characterized by an accepting and warm attitude or if criticism and rejection dominated. Taking all information, both explicit and implicit, into account, the mother's attitude was scored as either positive, doubtfully positive or more or less rejecting. Roughly the same classification was used in both interviews (III, IV).

The *child's perception of his or her parents* was studied in a projective play session. The method used is described in more detail elsewhere (Uddenberg & Englessen (1978a, b)). The child was invited to play with a doll's house and dolls representing different members of the family. On the basis of both the child's free report and its replies to standardized questions, the description of each of the parents was scored

along six dimensions: *parent punishing, parent rewarding, parent restricting, parent helping, parent rejecting, parent comforting*. Each parent was classified as either strongly, moderately or not punishing and so on for all the dimensions. In order to simplify the statistical treatment the child's perception of each parent was summarized on a positive/negative-scale (Pos/Neg-scale). One end of this scale contained mothers described as strongly rewarding, strongly comforting and strongly helping but not as punishing, restrictive or rejecting while the other end contained mothers described in the opposite way. Using an approximate median cut, the mothers were divided into two groups, one containing the 40 mothers who had been described predominantly positively by their children and another containing the 30 who had been described predominantly negatively ($n = 70$ as one had twins).

Statistical methods

Women who reported unsatisfactory early emotional relations to their fathers (or in some comparisons their mothers) were compared with the others. The statistical significance of the distributions was estimated by calculating the chi-square value or Fisher's exact P (Maxwell (1961)). A distribution was considered statistically significant when the probability that it should be caused by chance was less than 5 % (two-tailed test). Much interest was focused around concurrence. For instance, we were interested in whether there was a higher concordance between the quality of the early emotional relations to the father and the quality of the partner relations than between the quality of the early emotional relations to the mother and the quality of the partner relations. Level of concordance was estimated by calculating tetrachoric correlations (Φ).

RESULTS

Partner relations

The partner relations of women reporting poor early contact with their father were compared with those of women reporting satisfactory early paternal contact. In all three interviews (I, III, IV) women reporting poor partner relations were found to be over-represented among those describing their early emotional relations to their father as unsatisfactory (Table 1).

The early relationship to the mother was not equally strongly associated with the quality of the relationship to the partner as the early relationship to the father (Table 1). This was observed for the total period studied (Interview I, III, IV), but the difference was least accentuated post partum (Interview III).

In general the men were more reluctant than the women to criticize their partners. However, when the woman reported unsatisfactory early emotional relations to her father she was described negatively by her partner twice as often as when she reported satisfactory paternal relations (17 % as compared with 9 %, NS).

Relations to the child

If the woman's early experience of her father is connected with her later relations to her son in a sex-specific way, the following findings should be expected:

- 1) Mother-child interaction should be more strongly correlated to the mother's experience of her father in the case of a boy than in the case of a girl.
- 2) Mother-son interaction should be less strongly connected with the mother's experience of her own mother than with her experience of her own father.

Both these hypotheses were confirmed.

Table 1. Comparisons between reported emotional relations to father and mother during childhood and adolescence and reported relations to partner

	Poor early emotional relations to father (n = 27)	Good early emotional relations to father (n = 42)	Statistical significance
Partner relationship during pregnancy: "Not very good" (Int. I)	63 %	31 %	$\chi^2 = 6.85$ $P < 0.01$ $\Phi = 0.32$
Partner relationship post partum: "Not very good" (Int. III)	70 %	43 %	$\chi^2 = 5.00$ $P < 0.025$ $\Phi = 0.27$
Partner relationship at follow-up study: "Not very good" (Int. IV)	58 %	29 %	$\chi^2 = 5.28$ $P < 0.025$ $\Phi = 0.29$
	Poor early emotional relations to mother (n = 29)	Good early emotional relations to mother (n = 40)	Statistical significance
Partner relationship during pregnancy: "Not very good" (Int. I)	52 %	38 %	$\chi^2 = 1.30$ NS $\Phi = 0.14$
Partner relationship post partum: "Not very good" (Int. III)	65 %	45 %	$\chi^2 = 2.84$ NS $\Phi = 0.20$
Partner relationship at follow-up study: "Not very good" (Int. IV)	45 %	37 %	$\chi^2 = 0.39$ NS $\Phi = 0.08$

1) *The woman's general attitude towards her child* was recorded during Interview III (4 months post partum) and Interview IV (when the child was 4½ years old), and classified as either positive, doubtfully positive or rejecting. At both points of time, in the case of a boy, the mother's attitude was significantly or nearly significantly connected with her early experience of her father (Table 2). No such correlations were observed in the case of a girl (Table 2, compare Φ -values).

Using the Pos/Neg-scale, mother-child interaction was also studied from the viewpoint of the child. The *boy's description of his mother* strongly correlated with the mother's early emotional relations to her father (Table 3). Boys of mothers reporting poor paternal contact much more often than boys of mothers

Table 2. *Comparisons between the woman's emotional relationship to her father during childhood and adolescence, the sex of her child and her attitude towards the child (interviewer's estimation) as expressed in interviews III and IV*

Sex of child		Boy		Girl	
Early emotional relations to father		Good	Poor	Good	Poor
Attitude in interview III (4 months post partum)	Positive	16	6	12	7
	Doubtfully	6	8	9	6
	positive or rejecting	$P_{\text{ex}} = 0.10$ NS $\Phi = 0.30$		NS $\Phi = 0.03$	
Attitude in interview IV (4½ years post partum)	Positive	14	4	14	7
	Doubtfully	8	10	7	6
	positive or rejecting	$P_{\text{ex}} = 0.05$ $\Phi = 0.34$		NS $\Phi = 0.13$	

Table 3. *Comparisons between the woman's emotional relationship to her father during childhood and adolescence, the sex of her child and the child's description of its mother in the Pos/Neg-scale*

Sex of child		Boy		Girl	
Early emotional relations to father		Good	Poor	Good	Poor
Mother described positively		16	3	13	8
Mother described negatively		6	11	8	5
		$P_{\text{ex}} = 0.005$ $\Phi = 0.50$		NS $\Phi = 0.00$	

reporting a good paternal contact perceived their mothers negatively. In contrast, the *girl's perception of her mother* as reflected in the Pos/Neg-scale was totally unrelated to the mother's report about her early emotional relations to her father (Table 3).

2) Table 4 compares mother-son interaction, as reflected both in the report of the mother and in that of her son, to the mother's report about her contact with her own father and mother. The mother's attitude towards her son during the post partum period (Interview III) was equally strongly connected with her early maternal as with her early paternal contact. When the boy was 4½ years old (Interview IV), however, the mother's attitude towards him was connected to a greater extent with her early paternal than with her early maternal contact. Correspondingly, the boy's description of his mother was significantly linked with his mother's report about her early contact with her own father but not with his mother's report about her early maternal contact. Thus, when the boy was 4½ years old, the information from both mother and son indicated mother-son interaction to be more connected with the mother's experience of her father than with her experience of her mother.

Table 4. *Comparisons between the mother's early emotional relationship to her mother and father and various measures of mother-son interrelations*

	Early emotional relations to mother		Early emotional relations to father	
	Good	Poor	Good	Poor
Attitude towards son post partum (Int. III):	26 %	53 %	27 %	57 %
Doubtfully positive or rejecting	NS		$P_{\text{ex}} = 0.10$, NS	
	$\Phi = 0.27$		$\Phi = 0.30$	
Attitude towards son at follow-up study (Int. IV):	47 %	53 %	36 %	71 %
Doubtfully positive or rejecting	NS		$P_{\text{ex}} = 0.05$	
	$\Phi = 0.06$		$\Phi = 0.34$	
Son's description of mother on Pos/Neg-scale: Negative	37 %	59 %	27 %	77 %
	NS		$P_{\text{ex}} = 0.005$	
	$\Phi = 0.22$		$\Phi = 0.50$	

DISCUSSION AND CONCLUSIONS

Information regarding earlier and later interpersonal relationships are data which can easily be influenced by attitudes in the subject and/or the interviewer. For instance, some subjects are probably more willing than others to report conflicts. Further, all the interviews with the woman (I, III, IV) were carried out by the same investigator, who consequently may be biased. However, the woman's report about her interpersonal relations was augmented by direct information from her partner and child, collected by independent investigators. The results obtained when using this information confirmed those obtained when using information from the woman herself. This strongly supports the reliability of our observations.

Our findings strongly indicate connections between a woman's experience of her father and her way of interacting with other significant males later in life. Moreover, they suggest that the effect of the emotional relationship to the father is a specific one. The latter statement is confirmed by the following two observations: *Firstly*, the woman's experience of her father was more strongly related to her way of relating both to her partner and to her son than her experience of her mother. This was obvious in spite of the fact that negative experience of mother and negative experience of father were often reported by the same women. *Secondly*, the woman's experience of her father was related to her way of interacting with her son but to a much lesser extent with her way of interacting with her daughter.

This specificity, however, does not exclude unspecific effects. The poor partner relations of women reporting unsatisfactory emotional relations to their father obviously has implications for their way of interacting with a daughter as well as for their way of interacting with a son, but the connection is much more specific when the child is a boy.

Some of the connections between the woman's perception of her father and her interaction with her son may partly be mediated by indirect mechanisms. For instance, the negative description of the mother produced by sons of women reporting unsatisfactory early paternal contact may reflect the woman's way of interacting not only with her son but also with the boy's father. Four and a half-year-old boys identify with their fathers. Consequently, the boy's description of his mother may be influenced by attitudes that he has observed in his father.

Before the woman bears her boy, she has experiences of men other than her father, e.g. of one or more male partners. Her experience of these partners may be reflected both in the way she describes her father and in her way of interacting with her son. Our present and previous (Uddenberg (1976)) observations, however, suggest that these later experiences of men may often bring about a reinforcement of early established attitudes.

The mother's attitude to her baby boy during the post partum period was connected not only with her experience of her father but also with her experience of her mother. Further, partner relations during the same period showed a similar pattern. It is well documented that poor adaptation post partum is common in women describing complicated relations to their mother (e.g. *Melges* (1968), *Nilsson & Almgren* (1970), *Shereshefsky & Yarrow* (1973), *Uddenberg* (1974a, b), *Breen* (1975)). Maladaptation naturally would have generally adverse effects on the woman's interpersonal relations and thus affect her experience both of her son and her partner.

As the boy grows, his masculinity becomes more and more evident. The newborn boy and the newborn girl put much the same demands on their mother. However, when the boy becomes older he will activate those adaptive mechanisms in his mother that are specifically related to her interaction with men. This may explain why the connection between the quality of the contact with the father and the interaction with the son was more specific when the boy was 4½ years old than when he was newborn.

The concordance between the woman's way of perceiving her father and her way of relating to other men may be explained according to various psychological models. However, it is generally held that identity is shaped by interaction with significant persons in the environment. For instance, the girl's image of herself as a woman is achieved not only by identifying with models of the own sex, primarily the mother, but also by interacting with significant individuals of the opposite sex, primarily the father (*Mussen & Rutherford* (1963), *Money & Erhardt* (1972)). This implies that the father will be considered the prototype of men in general and that the relationship to him will be considered as "typical" for relationships to men. In this way the relationship to the father will be internalized and express itself in deeply rooted patterns of adaptation.

Obviously, any classification of the interrelations between two individuals as either satisfactory or unsatisfactory is very crude. The relationship has many different components, each of which may be more or less problematic and each of which may combine supporting and destructive ways of interacting. In this connection, for statistical reasons, we have indiscriminately grouped both parent relations and relations to the partner as satisfactory or unsatisfactory. Further,

the child's description of his mother was classified as either positive or negative. However, it seems probable that the correspondance between a woman's relations to different men that were observed when using these crude categories should also apply to more subtle aspects of her interpersonal relationships.

Our findings have several implications for therapists working with families. They give statistical support to previous clinical evidence that disturbed relations to the partner may not only reflect difficulties in the present situation but also be an expression of deeply rooted adaptive patterns connected with a general conception of the interrelations between men and women. Similar mechanisms may manifest themselves in the woman's way of interacting with her son. In a forthcoming publication (Uddenberg & Engleson (1978b)) we will present evidence that a woman's way of relating to her daughter is more strongly connected with her experience of her mother than with her experience of her father. Thus, the sex-specificity of a woman's way of perceiving and handling her children is emphasized. Obviously, the mother's experience of her own parents should be considered by the family therapist trying to grasp why the mother's relationship with her son or daughter has developed in a certain direction.

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SEXUAL DYSFUNCTION AND SEXUAL SATISFACTION IN 58 MARRIED SWEDISH MEN*

PER NETTELBLADT and NILS UDDENBERG

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Abstract—Information regarding male sexual function and satisfaction was gathered from a representative sample of 58 married Swedish men studied by means of semi-structured interviews. 23 men (40% of the total sample) reported a tendency towards sexual dysfunction, 22 (39% of the total sample) of these had experienced premature ejaculation, 6 (10% of the total sample) retarded ejaculation, and 4 (7% of the total sample) impotence. Sexual dysfunction was more common in men reporting early parental relations that may predispose for inadequate masculine identification. Thus, a report of poor contact with the father and a dominating mother was over-represented in sexually-dysfunctional men. Sexual dysfunction was not significantly related to the sexual satisfaction of the couple. In contrast, man's sexual satisfaction, while related to the emotional relationship to the wife and the child, was not associated with his early parental relations.

OUR KNOWLEDGE about male sexual dysfunction is incomplete in many ways. First, we do not know how common it is. Clinical studies are not very helpful in this context. Many men suffering from sexual dysfunction, for various reasons, do not seek medical help. Also, some forms of dysfunction are more incapacitating than others. This may explain why impotence and premature ejaculation dominate in clinical samples, whereas retarded ejaculation is less common [1-3]. Further, most of the available clinical studies suffer from an over-representation of the higher social classes [1-5]. None of the more extensive population studies give much information about the matter [6, 7]. As far as the authors know, there is only one recent population-based study discussing the frequency of male sexual dysfunction [8]. Consequently, even though the present sample is rather small, it is considered to be of interest as it makes an attempt to estimate the frequency of male sexual dysfunction.

Secondly, different authors stress different aspects of the background of male sexual dysfunction. Some [1, 2, 4] are of the opinion that constitutional factors may be particularly important. Others [9, 10] stress the importance of specific early experiences. Further, when studying the psychological background of sexual dysfunction, it may be an advantage to use a non-clinical population [11].

Thirdly, sexual dysfunction, at least when it occurs sporadically, need not necessarily interfere with sexual satisfaction. From studies of women we have evidence that sexual satisfaction may be relatively independent of sexual function and have a different psychological background [12, 13]. The present sample offered an opportunity to study these aspects in men.

SAMPLE AND METHODS

The sample

The present study is part of a broader longitudinal study of randomly-selected Swedish families. This study was carried out in order to elucidate psychological and social factors of importance for adaptation to parenthood and parent-child relations [14-17]. When the present data were collected, the oldest child of the couple was approximately 4.5 years old. Between January 1976 and January 1977, 61 men were selected according to the following criteria: (1) their wives had participated in the

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study and had been independently interviewed by one of the authors (N.U.); (2) they were living together with their wives and children. Only 3 men (5%) refused to be interviewed. Thus, the investigated sample comprised 58 men.

The interviews

All the men were interviewed by the same investigator (P.N.) who had no previous information about the family. The interview was semi-structured and generally took place in the home of the family. The median length of the interview was 2 hours (range: 1.15–3.0 hr). Contact with each of the parents was evaluated for childhood (up to 12 years) and adolescence (13–18 years). A good contact was noted when a close, open and warm relationship to the parent in question was reported. In contrast, poor contact was registered when the parent was described as distant or cool or when there had been more or less permanent conflicts. The man was also asked how much time he had spent with each of his parents during his childhood and adolescence, respectively. When the man had been brought up by other than his biological parents, the parent-figure whom the man recognized as the "significant" one was regarded as "the father" or "the mother". The man's perceived similarity to his father was estimated by asking him whether he considered himself more like his father than his mother, in general, in manners, appearance and interests. This information was summarized in a scale: "Perceived similarity to father" (Table 1).

TABLE 1.—HOMOGENEITY OF THE SCALES

	ϕ value	Level of significance
<i>Perceived similarity to father</i>		
Man considers himself more like his father than his mother		
in appearance	0.84	$p < 0.001$
in general	0.80	$p < 0.001$
in manners	0.49	$p < 0.001$
in interests	0.37	$p < 0.01$
<i>Sexual satisfaction of the couple</i>		
Man's opinion of the orgasmic frequency of his wife	0.51	$p < 0.001$
Man's opinion of the average coital frequency last year	0.43	$p < 0.001$
Man's opinion of his own sexual satisfaction	0.37	$p < 0.01$
Man's opinion of his wife's sexual satisfaction	0.35	$p < 0.01$
<i>Negative attitude towards the child</i>		
Child whining	0.56	$p < 0.001$
Child not letting things alone	0.41	$p < 0.01$
Child clinging	0.38	$p < 0.01$

The man's relationship to his wife was studied in several ways. For instance, he was asked to give a free description of his partner. When this description was dominated by positive feelings, a positive attitude was registered. When negative feelings at least as strong as positive ones were reported, an ambivalent or, in a few cases, negative attitude was noted. Further, the man was questioned about how many interests he and his partner had in common. Lastly, he gave his opinion about his marriage. Harmonious marital relations were registered when he reported that he and his partner could tackle the tasks of the family in a constructive way and give each other practical and emotional support. In contrast, poor relations were noted when he reported more or less permanent conflicts and lack of mutual support and contact. Occasional quarrels were not considered to indicate a poor marriage.

Later a sexual history was taken. The man reported about the atmosphere towards sexuality in his parental home, his age at sexual debut and the number of sexual partners he had had. His present sexual relation was estimated by questioning him about his own and his wife's sexual satisfaction, how often his wife reached orgasm and the average coital frequency during last year. This information was brought together in a scale denoted "Sexual satisfaction of the couple" (Table 1). Special attention was paid to the male's sexual function in his present relation. Thus, the presence of premature ejaculation, retarded ejaculation and impotence were recorded. In order to estimate how incapacitated the man had been, he was asked whether the dysfunction occurred often ($\approx 50\%$ of the coitions), rather often ($\approx 33\%$ of the coitions), seldom ($\approx 10\%$ of the coitions) or never ($\approx 0\%$ of the coitions).

Premature ejaculation was noted when the man reported that he often (12 men) or rather often (10 men) during coitus could not control ejaculation and consequently reached orgasm too fast [18]. Retarded ejaculation was registered when the man reported difficulties or inability to achieve ejacula-

tion during coitus [19] often (1 man), rather often (1 man) or seldom (4 men). *Impotence* was noted when the man reported inability to achieve a quality of erection sufficient to enable him to penetrate the vagina often (2 men), rather often (0 men) or seldom (2 men) [19]. Dysfunction that had occurred only in connection with a large intake of alcohol was not registered.

The information from the men (collected by P.N.) was compared with the information from the women (collected independently by N.U.). A significant correlation was observed regarding reported coital frequency last year ($\phi = 0.44$, $p < 0.001$), presence of male sexual dysfunction ($\phi = 0.32$, $p < 0.02$) and sexual satisfaction ($\phi = 0.47$, $p < 0.001$). Some of the information regarding the man's experience of his first-born child was summed up in a scale: "Negative attitude towards the child" (Table 1). Finally, information about current mental and physical health was collected. Current mental health was rated by asking the man about the presence of certain mental symptoms which were put together in a homogenous scale [20].

Statistical methods

The man's report about sexual dysfunction and sexual satisfaction, respectively, was compared to other data from the interviews. The statistical significance of the observed distributions was estimated by calculating χ^2 values. A distribution was considered statistically significant when the probability that it should be caused by chance only was less than 5% (two-tailed test). In order to estimate the relative strength of the connections observed, tetrachoric correlations were calculated [ϕ values; 21]. The different scales were constructed by adding the scores on each of the items included. On each of these the man was allotted 0, 1 or 2 points. The sample was divided into halves by means of approximate median cuts in each of the scales. All the items in a certain scale were significantly correlated with the scale as a whole (Table 1). Thus, the scales may be regarded as homogenous.

RESULTS

General characteristics of the sample

The sample comprised 58 men, who had their first child with their present partner about 4.5 yr ago. The median age of the men was 31 yr (range: 25–55 yr). The median time the couple had lived together was 6 yr (range: 4–11 yr). The majority of men (72%) had 2 children by their partner.

Age at first coitus. Median age at first coitus was 18 yr (range: 13–48 yr; Fig. 1).

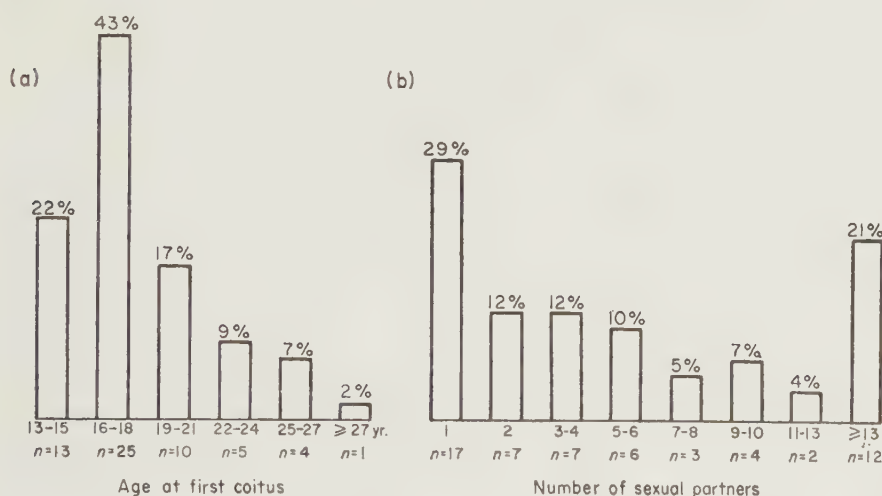


FIG. 1 (a).—Age at first coitus; (b) number of sexual partners ($n = 58$).

Number of sexual partners. Median was 4 partners (Fig. 1). In the group with the highest number of partners, the number varied from 15 to approximately 100 partners.

Coital frequency last year. Median was 1 per week (Fig. 2). In the group of 4 men with a coital frequency of ≤ 1 per year, two of the men reported no coitus last year, whereas the two others reported 1 coitus.

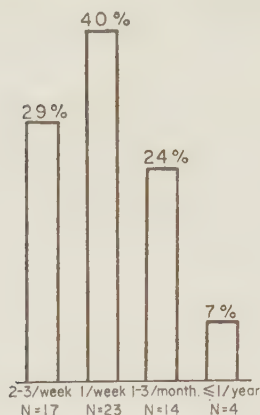


FIG. 2.—Coital frequency last year ($n = 58$).

Our data were compared with those of a population study by Zetterberg concerning the sexual behaviour of Swedish men and women [7]. In that study, median age at first coitus was 17.17 yr and median number of sex partners 4.7. When Zetterberg's observations regarding a general Swedish population (married and unmarried) were adapted to a sample with an age distribution as the present one, an average coital frequency of 1.4 per week was obtained. Thus, his observations agree with ours.

Sexual dysfunction

Frequency. A tendency towards sexual dysfunction in the present relationship was reported by 23 men (40% of the total sample). Of these, 22 (38% of the total sample) had experienced premature ejaculation, 6 (10% of the total sample) retarded ejaculation and 4 (7% of the total sample) impotence. Sixteen of the 58 men (28%) reported 1 dysfunction, 5 (9%) reported 2 dysfunctions and 2 (3%) reported 3 dysfunctions. Out of those reporting 2 dysfunctions, 4 reported premature and retarded ejaculation, whereas 1 reported premature ejaculation and impotence.

Background. There was no reason to suspect that any case of sexual dysfunction was secondary to organic disease. Nor was sexual dysfunction related to a high number of mental symptoms. The educational level, professional situation, economical or dwelling conditions of the man were not related to his sexual function. The man's description of his wife and of his marital relations were not associated with his sexual function. Nor were any associations between the sexual function of the man, his partner's educational level or professional situation observed. The sexual satisfaction of the couple was not connected with the male's sexual function. Nor was coital frequency last year related to the man's sexual function. Further, there was no correlation between organismic capacity as reported by the partner (interviewed by N.U.) and the sexual function of the man. The sexual atmosphere of the parental home, the man's age at his first coitus and his reported number of sexual partners were not associated with his sexual function.

However, many correlations between the man's report about his early parental relations and his sexual function were found. Thus, sexually-dysfunctional men more often than others, described their father in a negative way and the contact with him during childhood and adolescence as poor. The same men also more often reported that their fathers had spent relatively little time together with them in childhood and adolescence. Further, low perceived similarity to the father was connected with sexual dysfunction (Table 2). Regarding their maternal relations, dysfunctional men more often than others reported a poor and infrequent contact with their mother in adolescence. They also more often characterized her as dominating (Table 3).

Sexual satisfaction of the couple

The sexual satisfaction of the couple was not related to the man's current physical or mental health. Neither was any association with the present social situation of the family observed. Early parental relations were also not related to sexual satisfaction. However, men reporting sexual dissatisfaction tended to describe their wives in an ambivalent or negative way. They reported that the relation to the partner had deteriorated since the birth of the first child and that they had felt neglected at this point in time. They also reported a negative attitude towards their child.

TABLE 2.—COMPARISONS BETWEEN SEXUAL FUNCTION AND REPORTED RELATIONS TO FATHER

	Sexual dysfunction		
	Yes (<i>n</i> = 23)	No (<i>n</i> = 35)	
Father described			
pos./amb.	11	26	$\chi^2 = 4.21, 1 \text{ d.f.}, p < 0.05$
neg.	12	9	$\phi = 0.27$
Contact with father in childhood			
good	6*	19	$\chi^2 = 4.00, 1 \text{ d.f.}, p < 0.05$
poor	16	16	$\phi = 0.26$
Contact with father in adolescence			
good	10	24†	$\chi^2 = 4.86, 1 \text{ d.f.}, p < 0.05$
poor	13	9	$\phi = 0.29$
Often spent time together with father in childhood			
yes	3*	18	$\chi^2 = 8.29, 1 \text{ d.f.}, p < 0.01$
no	19	17	$\phi = 0.38$
Often spent time together with father in adolescence			
yes	8	21†	$\chi^2 = 4.52, 1 \text{ d.f.}, p < 0.05$
no	15	12	$\phi = 0.28$
Perceived similarity with father			
low (Q1-Q2)	14	12	$\chi^2 = 3.97, 1 \text{ d.f.}, p < 0.05$
high (Q1-Q2)	9	23	$\phi = 0.26$

*In one case, there was no biological father in childhood, but a stepfather from 11 years.

†In one case, the significant father-figure died when the man had been 8 years old. In another case, the biological father died when the man had been 12 years old.

TABLE 3.—COMPARISONS BETWEEN SEXUAL FUNCTION AND REPORTED RELATIONS TO MOTHER

	Sexual dysfunction		
	Yes (<i>n</i> = 23)	No (<i>n</i> = 35)	
Mother described			
pos./amb.	13	22	$\chi^2 = 0.33, 1 \text{ d.f.}, \text{N.S.}$
neg.	10	13	$\phi = 0.06$
Contact with mother in childhood			
good	16	26	$\chi^2 = 0.15, 1 \text{ d.f.}, \text{N.S.}$
poor	7	9	$\phi = 0.05$
Contact with mother in adolescence			
good	9	24	$\chi^2 = 4.91, 1 \text{ d.f.}, p < 0.05$
poor	14	11	$\phi = 0.29$
Often spent time together with mother in childhood			
yes	18	29	$\chi^2 = 0.24, 1 \text{ d.f.}, \text{N.S.}$
no	5	6	$\phi = 0.06$
Often spent time together with mother in adolescence			
yes	11	26	$\chi^2 = 4.21, 1 \text{ d.f.}, p < 0.05$
no	12	9	$\phi = 0.27$
Mother dominating			
yes	18	18	$\chi^2 = 4.24, 1 \text{ d.f.}, p < 0.05$
no	5	17	$\phi = 0.27$

DISCUSSION

The present data may be compared with Schnabl's data obtained by a mailed inventory [8]. This investigator reports a higher frequency of sexual dysfunction than that observed in the present study (67 vs 40%). Comparing the frequency of each dysfunction separately, premature ejaculation was noted almost equally often in the two studies (30 vs 38%), while the percentage of impotence was higher in Schnabl's study than in ours (20 vs 7%). Schnabl, unfortunately, gives no information about retarded ejaculation. Studies based upon clinical samples consider this dysfunction to be of minor importance [2, 3]. Kaplan [18], however, suggests that retarded ejaculation may be "highly prevalent in the population". This impression is supported by the present study.

Although the underlying neurophysiological mechanisms are different, many investigators have observed that a man having one form of dysfunction may also experience another [2, 3, 8, 18]. This is confirmed by the present study and argues for a common psychological background of male sexual dysfunction. Data from our study indicate that inadequate parental relations may be important factors behind male sexual dysfunction. Poor contact with the father seems to be particularly important in this connection. We also observed a dominating mother to be more frequently reported by sexually-dysfunctional men than by others. From a cross-cultural point of view, it is of special interest to compare our findings with 2 other studies [9, 10] based on patients from the Middle East. Both these investigators report inadequate childhood contact with the father to predispose for male sexual dysfunction. Poor contact and access to the father and domination by the mother may impair the boy's possibilities of masculine identification [22]. The hypothesis that poor masculine identification may predispose for male sexual dysfunction is supported by our observation that sexually-dysfunctional men more often than others reported a low perceived similarity to their fathers.

The sexual satisfaction of the couple, however, was related to the man's report about his present emotional situation. For instance, poor sexual satisfaction was connected with poor relations to the wife and the child. The data also indicated that the deterioration of the relationship had often started with the birth of the first child. This emphasizes the importance of the first *post-partum* period for the future emo-

TABLE 4.—COMPARISONS BETWEEN SEXUAL SATISFACTION OF THE COUPLE AND REPORTED RELATIONS TO WIFE AND CHILD

	Sexual satisfaction of the couple		
	Q1-Q2 (n = 25)	Q3-Q4 (n = 33)	Q1-Q2/Q3-Q4 (median cut)
Wife described			
pos.	19	17	$\chi^2 = 3.62$, 1 d.f., N.S. $\phi = 0.25$
amb./neg.	6	16	
Deteriorated relation to wife since birth of first child			
yes	2	13	$\chi^2 = 7.31$, 1 d.f., $p < 0.01$ $\phi = 0.36$
no	23	20	
Negative attitude towards the child			
yes (Q1-Q2)	7	13	$\chi^2 = 6.07$, 1 d.f., $p < 0.02$ $\phi = 0.32$
no (Q3-Q4)	18	20	

tional adaptation of the family [15]. The man's report about his and his partner's sexual satisfaction was not related to his report about his sexual function. One reason for this may be that occasional sexual dysfunction may not interfere with sexual satisfaction. Further, even perfect sexual function does not warrant that the intercourse is gratifying from an emotional point of view. Thus, the psychological background of sexual dysfunction and of sexual satisfaction was found to be different. This corresponds with evidence regarding orgasmic dysfunction and sexual satisfaction in women [13]. Similar to the present study of men, this previous study of women indicated that sexual function is related to early parental relations. Sexual satisfaction, however, is more related to the couple's present emotional relationship.

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Father/child relationship: Background factors in the father

P. NETTELBLADT, N. UDDENBERG AND I. ENGLESSON

This investigation studied by direct interviews in a randomly selected sample of 58 Swedish unbroken families, factors of importance for the father's experience of his preschool child. The father's experience of his child was shown to correlate with the child's experience of him.

Fathers experiencing their child in a positive way had been more active in the care of the child, less "authoritarian" and more physically intimate. They described good marital relations. Fathers with a low income or unsatisfied with their job were more negative towards their child than others. There was no association between the father's mental health and his experience of his child. Fathers reporting poor early parental contact were less positive towards their child than others. The man's relation to his own father was more connected with his experience of his child than his relation to his own mother, especially when the child was a boy.

Key words: Family relations - father/child relations - population study.

The role of the father has changed (*Liljeström* (1973, 1976), *Gollob* (1976)). Previously, the father was regarded as the bread-winner of the family, whereas the mother was regarded as the house-keeper and fosterer of the children (*Parsons & Bales* (1955)). The father's obligations did not extend into the actual caretaking and nurturing of the children. If the father's emotional contribution to his family was considered, his role as a support to the mother was emphasized (*Bowlby* (1951), *Bartemeier* (1953)).

As a consequence the mother has been the main object for previous research (*Melges* (1968), *Nilsson & Almgren* (1970), *Uddenberg* (1974), *Breen* (1975), *Lagerkrantz* (1975), *Uddenberg & Englessen* (1979)). Since the end of the sixties Swedish family policy has declared, as a primary goal, equalizing the conditions of men and women both at home and in the labour market (*Liljeström* (1976)). However, there are few studies concerning a man's adaptation to fatherhood (*Nash* (1965), *Lamb* (1975)).

The main objective of the present study was to investigate factors of importance for the man's adaptation to fatherhood in a randomly selected sample of Swedish unbroken families. Using independently collected data it was possible to compare the man's way of looking upon his preschool child with the child's description of him. Further, it was possible to study how the man's

experience of his child was related to his previous and present emotional and social situation. In a study of *Heath* (1976) it was suggested that, in an unspecific way, a man's competence as a father is just one of many competencies derived from a basic underlying general maturity. However, the mechanisms behind adaptation to parenthood may also be more specific. From studies on women (*Melges* (1968), *Nilsson & Almgren* (1970), *Shereshefsky & Yarrow* (1973), *Uddenberg* (1974), *Breen* (1975), *Lagerkrantz* (1975), *Uddenberg & Englesson* (1979)) it is known that the woman's early parental relations are important for her adaptation to motherhood. Moreover, it has been pointed out that the mother's relationship to the parent of the same sex as the child may be of special importance (*Shereshefsky & Yarrow* (1973), *Uddenberg et al.* (1979), *Uddenberg & Englesson* (1979)). Consequently, in this study of fathers, special interest was devoted to the man's experience of each of his own parents.

SAMPLE AND METHODS

General characteristics of the sample

The present study is part of a broader longitudinal study of randomly selected Swedish families. The study was carried out in order to elucidate psychological and social factors of importance for adaptation to parenthood and parent-child relations (*Uddenberg* (1974), *Uddenberg & Englesson* (1978), *Uddenberg et al.* (1979)). When the present data were collected the first-born child of the family was approximately 4½ years old.

In January 1976–January 1977, 61 men were selected according to the following criteria:

- 1) Their wives had participated in the study and had been independently interviewed by one of the investigators (N.U.).
- 2) They were living together with their wives and children.

Only 3 men (5 %) refused to be interviewed. Thus, the investigated sample comprised 58 men, who had their first child with the present partner about 4½ years ago. Three men had children with a previous partner.

The median age of the men was 31 years (range: 25–55 years), and the median age of their wives was 29 years (range: 25–37 years). The couple had lived together for a median time of 6 years (range: 4–11 years). The children were approximately 4½ years old (range: 3 years, 11 months to 4 years, 8 months). There were 31 boys and 27 girls. The majority of the children (72 %) had a younger sibling.

The educational level was estimated as high, i.e. university studies in 40 %, moderate in 27 % and low, i.e. no education beyond 7 years of elementary school, in 33 %. The median income of the family was \$ 16,000 (= 70,000 Swedish crowns, range: \$ 8,000–36,000 (= 35,000–160,000 Swedish crowns, 1976)). None of the fathers was unemployed. Fifty-nine per cent of their wives held an outside job. No family was in permanent need of social welfare. Of the families, 66 % were living in houses of their own, whereas 34 % of them were living in apartment houses. Thus, the sample can be regarded as reasonably representative of the average unbroken Swedish family of a small child. The

number of families with severe social difficulties, however, may be somewhat low.

Information from the man

All the men were interviewed by the first author (P.N.), a trained psychiatrist, who had no previous information about the family. The interview was semi-structured and the interview technique rather similar to that described by *Sears et al.* (1957). The interview with few exceptions took place in the home of the family. The time for the interview ranged from 1.15–3.0 hours (median: 2 hours).

The interview started with questions about the present and previous social situation of the man. Thus, he was asked about his *educational background*, *professional* and *economical* situation. His *satisfaction with the present dwelling place* was also discussed. He was asked about the relations to the neighbours and if the family was cramped for space. In a similar way as above, the man's *social situation during his growing-up years* was investigated.

Contact with each of the parents was evaluated for *childhood* (up to 12 years) and *adolescence* (13–18 years). A good contact was noted when a close, open and warm relationship to the parent in question was reported. In contrast, poor contact was registered when the parent was described as distant or cool or when there had been more or less permanent conflicts. If a man had been brought up by others than his biological parents, the parent-figure whom the man recognized as "the significant one" was regarded as "the father" or "the mother".

The man's relationship to his wife was also evaluated. He was asked about his opinion of his marriage, how many interests he and his wife had in common and about their sexual relations. Further, he was encouraged to give a free description of his wife. From this, in the same way as when estimating the man's experience of his child, the interviewer estimated how the man experienced his wife.

The relation between the man and his preschool child was covered in different ways. The man was asked about what the child signified for him, how he experienced outbursts of the child's temper, if the child was lively, craving attention, stubborn, whining, clinging, not letting things alone, sensitive or anxious. From these topics and others spontaneously brought up by the father, the interviewer tried to sum up explicit and implicit information and made a *global estimation of the man's experience of his child*. When doing this it was taken for granted that the child meant both positive and negative things for the man. It was only when the negative feelings were prominent that the man's experience of his child was estimated as ambivalent or negative. However, this did not mean that the man had exclusively negative feelings for his child. Thus, 43 men were estimated to experience their child in a predominantly positive way, whereas 15 men were estimated to experience their child in an ambivalent or negative way. In this paper the latter group of 15 fathers (negative) were compared with the other 43 (positive).

In order to get a rough estimation of how much the man had taken care of his child during its first year of life he was asked about different previously defined "caretaking situations". For instance, he was asked about how often

he had bathed his child, changed diapers, helped it during meals and put it to bed. On each of these four items, the man was allotted 0, 1 or 2 points. The points given were higher, the more active the man had been. This information was put together in a scale: "*Early paternal caretaking*" and the sample was divided into halves by means of an approximate median cut. As all the items were significantly correlated to the scale ($P < 0.001$; phi-values: 0.49–0.81), it was homogeneous. As a measure of *how much the man took care of his child at present* the following two situations were considered: "How often did the father help the child during meals?" and "How often did the father put the child to bed?" *The rearing attitude of the man* was evaluated as either "authoritarian" or "non-authoritarian". The man was asked about his way of rearing in different situations. His attitude was estimated as "authoritarian" when he was limit-setting without paying much attention to the needs of the child. On the contrary, the way of rearing was said to be "non-authoritarian" when more or less attention was paid to the needs of the child before setting limits. Occasional physical punishment was not necessarily regarded as "authoritarian". *The present intimacy* between the man and his child was estimated by the following questions: "Did the child want to be cuddled?" and "Did the child often sit in the lap of the man?"

Current mental health was rated by asking the man about the presence of certain mental symptoms (16). As no item had a Dpk-value below 0.30 (Smith & Marke (1958)) the scale was homogeneous (Table 1). The number of affirmed mental symptoms for each man was assessed and the sample divided into halves by an approximate median cut.

The *alcoholic consumption* of the man was estimated by asking him about how many centilitres of spirits, wine and beer he drank every week. According to the amount reported, the sample was divided into halves by means of an approximate median cut.

Table 1. *Reported current mental symptoms* (n = 16)

Symptoms	Dpk-value
Concentration difficulties	0.80
Often depressed	0.78
Feelings of inferiority	0.69
Contact problems	0.67
Sense of fatigue	0.65
Tendency to compulsions	0.59
Sensitivity	0.53
Difficulties in relaxing	0.50
Sleep problems	0.50
"Heart symptoms"	0.50
Loss of control	0.47
Increased liability to fatigue	0.46
Sensitivity to criticism	0.41
Attacks of fear	0.36
Morbophobia	0.36
Fear of people in crowds	0.31

Information from the woman

All information from the women was independently collected by one of the investigators (N.U.) and centred around the same topics as the interviews with the men. A detailed description of the sample of the wives and the semi-structured interviews used is given elsewhere (Uddenberg (1974, 1979)).

Information from the child

The child's perception of its father and mother was studied in a projective play session (Uddenberg & Englessen (1978, 1979), Uddenberg *et al.* (1979)). This was carried out in the home of the family by a child psychologist (I.E.) who had no previous information about the families. When alone with the psychologist, the child was invited to play with a doll's house, a mother-doll, a father-doll, a doll representing itself and a doll representing a younger sibling if there was any. After arranging the furniture, the child started to play with the dolls. A number of different situations representing an "ordinary day" were reproduced.

- A. The family members rise, dress and have breakfast.
- B. The child goes out to play.
- C. The members of the family have dinner together.
- D. The child breaks a valuable vase.
- E. The child goes to bed in the evening.
- F. The parents go out for the evening, leaving the child with a baby-sitter.

The child was encouraged to report freely, but some standardized questions were posed (free Swedish translations from the Family Relation Test, FRT (Bene & Anthony (1957))).

Using both the free report and the replies to the standardized questions, the child psychologist (I.E.) made an overall estimation of how the child perceived its father and its mother. This was made in a similar way as when the parents' experience of their child was considered. The child's description of its father was estimated as predominantly positive in 28 cases and predominantly negative in 30 cases.

Statistical methods

The father's experience of his preschool child and the child's experience of him were compared with other data from the investigation. The statistical significance of the observed distributions was estimated by calculating χ^2 -values. Yates' correction for discontinuity was employed when any expected value was below 5. When the total number of individuals was particularly low (≤ 31) Fisher's exact probability was calculated. A distribution was considered statistically significant when the probability that it should be caused by chance was less than 5 % (two-tailed test). The relative strength of the different relations was estimated by calculating tetrachoric correlations (Maxwell (1961)).

RESULTS

The man's experience of his child and other aspects of the father/child relationship (Table 2)

Table 2. *Comparisons between the man's experience of his child and other aspects of the father/child relationship (n = 58)*

	Child experienced		
	pos. (n = 43)	neg. (n = 15)	
<i>Participation in the care of the child</i>			
Early paternal caretaking			
Low (Q1-Q2)	16	11	$\chi^2 = 5.83$, 1 d.f., $P < 0.02$
High (Q3-Q4)	27	4	$\varphi = 0.32$
Man often helping child during meals			
Yes	28	5	$\chi^2 = 4.58$, 1 d.f., $P < 0.05$
No	15	10	$\varphi = 0.28$
Man often putting child to bed			
Yes	27	4	$\chi^2 = 5.83$, 1 d.f., $P < 0.02$
No	16	11	$\varphi = 0.32$
<i>Rearing attitude</i>			
Child reared in an authoritarian way			
Yes	4	6	$\chi^2 = 5.35$, 1 d.f., $P < 0.05$
No	39	9	$\varphi = 0.30$
Man often using physical punishment			
Yes	21	13	$\chi^2 = 6.56$, 1 d.f., $P < 0.02$
No	22	2	$\varphi = 0.34$
<i>Intimacy</i>			
Child wants to be cuddled			
Yes	41	10	$\chi^2 = 6.13$, 1 d.f., $P < 0.02$
No	2	5	$\varphi = 0.33$
Child often in the lap of the man			
Yes	36	8	$\chi^2 = 4.07$, 1 d.f., $P < 0.05$
No	7	7	$\varphi = 0.26$

Men who were positive towards their child were more active in taking care of the child. This applied both to when the child was an infant and more recently. Fathers positive to their children were also estimated as less "authoritarian" and were less liable to use physical punishment. They had also been more intimate with their child. In general, these fathers were more nurturant and affectionate towards their child as compared to men being more negative towards their child. The "negative" fathers were more strict and rejecting.

The man's experience of his child and the child's description of him (Table 3)

There was a strong connection between the man's experience of his child and the child's description of him in the projective play session. On the other hand, the child's description of his father was not correlated to the mother's experience of it or to the child's description of her. Thus, the child seemed to be able

Table 3. Comparisons between the man's experience of his child and the child's description of him (n = 58)

	Child experienced		
	pos. (n = 43)	neg. (n = 15)	
<i>Child's report (I.E.)</i>			
Father described			
Pos.	25	3	$\chi^2 = 6.48, 1 \text{ d.f.}, P < 0.02$ $\varphi = 0.33$
Neg.	18	12	
<i>Boys only</i>			
Pos.	16	2	$P = 0.15$
Neg.	8	5	$\varphi = 0.32$
<i>Girls only</i>			
Pos.	9	1	$P = 0.18$
Neg.	10	7	$\varphi = 0.33$

Table 4. Comparisons between the man's experience of his child and his social background (n = 58)

	Child experienced		
	pos. (n = 43)	neg. (n = 15)	
Satisfied with the present dwelling place			
Yes	34	11	$\chi^2 = 0.18, 1 \text{ d.f., n.s.}$ $\varphi = 0.06$
No	11	4	
Total family income			
≤ \$ 13,000 (= 60,000 Swedish crowns)	8*	7	$\chi^2 = 3.04, 1 \text{ d.f., n.s.}$
> \$ 13,000 (= 60,000 Swedish crowns)	34	8	$\varphi = 0.23$
Man satisfied with his job			
Yes	34	8	$\chi^2 = 2.51, 1 \text{ d.f., n.s.}$ $\varphi = 0.21$
No	9	7	
Educational level			
High/moderate	30	9	$\chi^2 = 0.14, 1 \text{ d.f., n.s.}$ $\varphi = 0.05$
Low	13	6	
Educational level of the parental home			
High/moderate	8	5	$\chi^2 = 0.67, 1 \text{ d.f., n.s.}$ $\varphi = 0.11$
Low	35	10	

* In one case the man did not want to give any information about the income of the family.

Table 5. *Comparisons between the man's experience of his child and his relation to his wife*

	Child experienced		
	pos. (n = 43)	neg. (n = 15)	
<i>Man's report</i>			
Man's experience of his wife			
Pos.	41	10	$\chi^2 = 6.12, 1 \text{ d.f.}, P < 0.02$ $\varphi = 0.32$
Neg.	2	5	
Common interests with wife			
Many	40	10	$\chi^2 = 4.47, 1 \text{ d.f.}, P < 0.05$ $\varphi = 0.28$
Few	3	5	
Man satisfied with the present sexual relation to his wife			
Yes	39	9	$\chi^2 = 5.35, 1 \text{ d.f.}, P < 0.05$ $\varphi = 0.30$
No	4	6	
Coital frequency $\geq 1/\text{week}$			
Yes	33	7	$\chi^2 = 3.40, 1 \text{ d.f.}, \text{n.s.}$ $\varphi = 0.24$
No	10	8	

to discriminate between its relations to the father and to the mother.

Taken together the above findings strongly indicate that our estimation of the man's experience of his child is a rather specific, comprehensive and relevant measure referring to essential components of the father/child relationship.

The man's experience of his child and his social background (Table 4)

There were no associations between the man's experience of his child and his satisfaction with the present dwelling place of the family. Further, his educational level was of no importance. However, a negative description of the child was over-represented in men not satisfied with their job or having a low income ($\leq \$ 13,000$).

Also the man's social conditions during his childhood seemed to be less important. The educational level of his parental home was for instance not related to his experience of his child. This may be contrasted to the importance of the emotional climate in the man's parental family (see below).

The man's experience of his child and his relation to his wife (Table 5)

Men describing their wives in a positive way more often than others were positive towards their children. Other signs of a good marital relationship such as sexual satisfaction and community of interest were also positively related to the man's experience of his child.

Table 6. *Comparisons between the man's experience of his child and the emotional relations in his parental family (n = 58)*

	Child experienced		
	pos. (n = 43)	neg. (n = 15)	
<i>Own father</i>			
Contact with own father in childhood			
Pos.	30*	5	$\chi^2 = 6.77, 1 \text{ d.f.}, P < 0.01$ $\varphi = 0.34$
Neg.	12	10	
Contact with own father in adolescence			
Pos.	29**	5***	$\chi^2 = 4.89, 1 \text{ d.f.}, P < 0.05$ $\varphi = 0.30$
Neg.	13	9	
<i>Own mother</i>			
Contact with own mother in childhood			
Good	34	8	$\chi^2 = 2.51, 1 \text{ d.f.}, \text{n.s.}$ $\varphi = 0.21$
Poor	9	7	
Contact with own mother in adolescence			
Good	25	8	$\chi^2 = 0.09, 1 \text{ d.f.}, \text{n.s.}$ $\varphi = 0.04$
Poor	18	7	
Marriage of own parents			
Good	22***	4	$\chi^2 = 2.95, 1 \text{ d.f.}, \text{n.s.}$ $\varphi = 0.23$
Poor	20	11	

* In one case there was no biological father in childhood, but a step-father from 11 years.

** In one case the significant father-figure died when the man was 8 years old. In another case the biological father died when the man was 12.

*** In one case the man mainly was brought up by his grandparents and a mother who never established any new relation to another man.

The man's experience of his child and the emotional relations in his parental family (Tables 6 and 7)

Fathers who were positive towards their child had more positive experiences of their parents' marriage. Further, the same fathers generally reported positive relations to their own parents. The man's relationship to his own father seemed to be especially important in this connection. A report of poor contact with the own father both as a child and as a teenager was related to a negative experience of the child. However, the man's early relationship to his own mother was only weakly associated with his experience of his child.

The specific importance of the man's relation to his own father for his way of relating to his child was even more evident when the sex of the child was considered. When the child was a boy, the man's contact with his father and

Table 7. *Comparisons between the man's experience of his child and sex-determined differences as regards his emotional relations to his own mother and father respectively (n = 58)*

	Boy experienced			Girl experienced		
	pos. (n = 24)	neg. (n = 7)		pos. (n = 19)	neg. (n = 8)	
<i>Own father</i>						
Contact with own father in childhood						
Good	18	1	$P = 0.02$	12*	4	$P = 0.48$
Poor	6	6	$\varphi = 0.52$	6	4	$\varphi = 0.16$
Contact with own father in adolescence						
Good	17**	2	$P = 0.08$	12	3**	$P = 0.46$
Poor	6	5	$\varphi = 0.39$	7	4	$\varphi = 0.18$
<i>Own mother</i>						
Contact with own mother in childhood						
Good	19	4	$P = 0.38$	15	4	$P = 0.24$
Poor	5	3	$\varphi = 0.21$	4	4	$\varphi = 0.29$
Contact with own mother in adolescence						
Good	14	4	$P = 0.67$	11	4	$P = 0.61$
Poor	10	3	$\varphi = 0.01$	8	4	$\varphi = 0.07$

* In one case there was no biological father in childhood, but a step-father from 11 years.

** In one case the significant father-figure died when the man was 8 years old. In another case the biological father died when the man was 12.

his contact with his child were strongly related to each other. However, when the child was a girl, no statistically significant connections between the man's paternal contact and his experience of his child were observed.

The man's experience of his child and his mental health and alcoholic consumption

The number of mental symptoms affirmed by the man was not associated with his experience of his child. Also, his alcoholic consumption did not show any relation to his experience of it.

DISCUSSION

The variable studied in this paper is a global estimation of the man's experience of his child as either positive or negative. Related to a positive attitude were "non-authoritarianism", intimacy and a more active participation in the care of the child. A positive experience of the child can thus be regarded as just one expression of a general nurturant attitude.

Recently, however, in Sweden special interest has been devoted to the importance of the father's participation in the care of the child. It has been demonstrated (SOU: 1976: 71) that fathers actively taking part in the care of their children more often than others describe their contact with them as positive. Since 1974, Sweden has offered a "parenthood" leave to the father or the mother for 180–210 days at 90 % of salary. In a follow-up study of the outcome of this reform (SOU: 1978: 39) it was found that those fathers who made use of their "parenthood" leave continued to participate in the care of the child and found it worth-while. Similarly, the present study demonstrates a connection between the father's participation in the practical care of the child and his experience of it.

We find the semi-structured interview to be the most suitable tool for collecting information about such delicate matters as those studied in this paper. However, all information from the man was collected by one interviewer, who obviously may have been biased. For this reason, it is of great value to find a strong correspondence between the estimation of the man's experience of his child and the child's description of its father as independently estimated by the child psychologist.

Heath (1976) found that a man's competence as a father as rated by himself and his wife was related to positive feelings for the children, good mental health, professional responsibility and marital happiness. Although his sample was rather skewed representing only highly educated American middle class fathers, it was very similar to the present one in respect of other characteristics. It consisted of 49 fathers who were in their early thirties. The typical father had been married 8 years and had two children of which the oldest one was about 5½ years old. Consequently, it is of interest to compare the findings of *Heath* with the findings of the present study.

Contrary to the findings of *Heath* (1976), we found no connections in the present study between the man's experience of his child and his mental health. One reason for this may be the different definitions of mental health used in the two studies. The lack of association between the man's experience of his child and his mental health may also be due to the fact that parenthood generally has less social consequences for a man than a woman (*Liljeström* (1973, 1976)). It has been observed (SOU: 1978: 39) that even in cases when both the man and his wife hold an outside job on equal terms, the wife is the one who has the chief responsibility for the household and the care of the children. Thus, it is reasonable to presume that parenthood in the Swedish society may be a minor threat to the mental health of the man. Probably, the time shortly after the birth of the child is a critical period during which the man may react with poor mental health (*Earls* (1976)). However, some years later the man has had more time to adapt himself to his new role.

Compatible to the findings of *Heath* (1976) is the association between a negative experience of the child and the man's report that he was not satisfied with his job or had a low income. Naturally, these associations may only express that the man is generally unsatisfied both with his job and with his family. But they are also understandable from another point of view. A father coming

home tired and unsatisfied with his job may also have more difficulties in meeting the demands of his child during the limited time in the evening spared for father/child-interaction. This could be compared with the findings of another Swedish study (SOU: 1976: 71) that fathers forced to take care of their children because of unemployment and sickness experienced the contact with their children as improved. Probably, even when the father is at home because of social inconveniences he will nevertheless have a greater opportunity to develop himself as a father.

In the study of *Heath* (1976) it was found that men and women had different opinions about what makes a good father. For the men, the core component was their engagement in the child. For the women, such engagement was important, but not enough. Other qualities such as the man's ability to give the woman practical and emotional support were also necessary (*Heath* (1976), *Bartemeier* (1953), *Bowlby* (1951)). Conflicts between the man and the woman obviously make it difficult for them to support each other as parents. This may make it difficult for the man to engage himself in the child. Further, it is possible that a man who for various reasons is not "family-oriented" may describe both his wife and his child less positively. One reason for the man not being "family-oriented" may be that he has experienced his original, parental family as disharmonic. This is in accordance with *Dicks* (1963) who argued that "in-built" role models of their own parents are of importance for the way a couple will relate to each other in a marriage.

The man's experience of his child may be dependent upon his relationship with his own parents. When becoming a father it is essential for the man to overcome the more or less severe emotional conflicts he himself has had with his own parents. If not, they may be reactivated and give him problems. This is clearly demonstrated in the present study: a poor relationship to the man's own parents in childhood was much more common in men who experienced their children in a negative way. However, the man's relationship with his own father was more strongly connected with his experience of his child than his relationship with his own mother.

Naturally the mother, especially in early childhood, sets a model for a general caretaking attitude in her son. However, the boy can not learn what it means to be a father by observing his mother but only by interacting and identifying with his father. The discrepancy we observed in the relative importance of the man's relationship to his father and to his mother, stresses the father's importance as a model for his son when the latter himself becomes a father. Similarly, it has been demonstrated that the same sexed parent, i.e. the mother, is of great importance as a model for the woman when she becomes a mother (*Melges* (1968), *Nilsson & Almgren* (1970), *Uddenberg* (1974), *Breen* (1975), *Lagerkrantz* (1975), *Uddenberg & Englesson* (1979)).

However, the sex of the child may also be important. There is evidence that the mother/daughter-relation is more connected with the mother's experiences of her own mother, whereas the mother/son-relation is more related to her experiences of her own father, i.e. the parent of the same sex as the child (*Shereshfsky & Yarrow* (1973), *Uddenberg et al.* (1979), *Uddenberg & Englesson*

(1979)). Hence, the man's experience of his child and his early parental contact were analysed taking the sex of the child into consideration. It was found that the associations between the man's reported contact to his father was more strongly associated with his experience of his child when the child was a boy. In a similar way as has been shown for women (*Shereshefsky & Yarrow (1973), Uddenberg & Englesson (1979)*) this may indicate that the father's relation to the parent of the same sex as the child is of specific importance for his adaptation to fatherhood.

The study of *Heath (1976)* suggested that paternal competence was just one of many competencies derived from a basic underlying general maturity of the father. The results of this study do not contradict this statement, but also point to a more specific meaning of the man's early parental relations for his adaptation to fatherhood. Obviously, not only for a woman, but also for a man, the experiences of being a child are of great significance for their experience and handling of their own children.

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Mental health of 58 Swedish men living together with their wives and preschool children

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The mental health of the man was studied in a random sample of 58 Swedish unbroken families. Men with mental symptoms above an approximate median were compared to men with mental symptoms below the median. Thirteen of the men with mental symptoms were regarded as suffering from clinical psychopathology. Men reporting many mental symptoms more often than the others, had poor contact with their parents and poor mental health during childhood and adolescence, and also their parents' marriage had been disharmonious. Men with mental symptoms above the median more often tended to have a less satisfying relationship to their wives and children. This same group of men usually had low incomes and tended to be dissatisfied with their job and present dwelling. There was no relationship between the man's current mental health and the child's report of its emotional contact with its father in a projective play session. Nor was the number of mental symptoms related to the emotional and intellectual development of the child.

Key words: Mental health – men – father/child relations – child development – marriage – parental relations – level of income.

Man's childhood experiences have been related to his adult mental health. In the Midtown-Manhattan study (*Langner & Michael* (1963)) there was a relationship between poor mental health and reported poor emotional relationship to the parents. *Vaillant* (1974) found that male mental health in adulthood was related to the emotional climate of the man's childhood. Further, in both studies poor mental health was more common when one or both of the parents had been mentally ill during the subject's childhood.

However, a man's present living conditions have also been connected with his mental health. Thus, a man's mental health has been associated with his emotional relationship to his wife and children (*Langner & Michael* (1963), *Vaillant* (1974), *Heath* (1976)). Further, two Swedish investigations (*Jonsson & Kälvesten* (1964), *SOU* (1970)) have found an association between poor mental health and a low level of income.

Clinical studies (*Rutter* (1966), *Wolff & Acton* (1968), *Rutter et al.* (1977)) and population studies (*Buck & Laughton* (1959), *Kellner* (1963), *Hare & Shaw* (1965), *Rutter et al.* (1975), *Richman* (1975)) have both shown an association between poor mental health in the parents and emotional disturbances in the children. Most of these studies (*Buck & Laughton* (1959), *Kellner* (1963), *Hare*

& Shaw (1965), Wolff & Acton (1968), Rutter *et al.* (1975), Richman (1975)) suggest that poor mental health of the mother might be of special importance in this connection.

The present investigation is based upon a randomly selected sample of Swedish men living together with their wives and 4½-year-old children. Information from the man, wife and child were independently collected by different investigators. In order to examine the importance of the parents for the child's development, the child's perception of them was studied in a projective play session (Uddenberg & Englesson (1978, 1980), Uddenberg *et al.* (1979), Uddenberg (1980)). Further, the logic-inductive, spatial and verbal ability of the child was studied by Raven's Coloured Matrices (Raven (1966)), and different subtests from the Swedish version of the Terman-Merrill Intelligence Test (Terman & Merrill (1947)). A clinical assessment of the child's social maturity was also made.

In this paper we have studied possible determinants of male mental health and the relationship between the man's mental health and the development of his preschool child. The following issues were considered:

- 1) Are there any associations between the man's mental health and his emotional experiences during his formative years?
- 2) Are there any associations between the man's mental health and his relation to his wife and child?
- 3) Are there any associations between the man's mental health and his social circumstances such as education, income, job and dwelling place?
- 4) Are there any associations between the man's health and his child's emotional and intellectual development?

SAMPLE AND METHODS

General characteristics of the sample

The present study is part of a broader longitudinal study of randomly selected Swedish families. The study was carried out in order to elucidate psychological and social factors of importance for adaptation to parenthood and parent/child relationship (Uddenberg (1974), Uddenberg & Englesson (1978, 1980), Uddenberg *et al.* (1979), Nettelbladt *et al.* (1980)).

During January 1976–January 1977, 61 men were selected according to the following criteria:

- 1) Their wives had participated in the study and had been independently interviewed by one of the investigators (N.U.).
- 2) They were living together with their wives and children.

Only three men (5 %) refused to be interviewed. Thus, the investigated sample comprised 58 men, who had their first child with the present partner about 4½ years ago. Three of the investigated men had children with a previous partner.

The median age of the men was 31 years (range: 25–55 years), and the median age of their wives was 29 years (range: 25–37 years). The couples had lived together for a median time of 6 years (range: 4–11 years). The children

were approximately 4½ years old (range: 3 years and 11 months – 4 years and 8 months). The children comprised 31 boys and 27 girls. The majority of the children (72 %) had a younger sibling.

The educational level of the man was estimated as high (university studies) in 40 %, low (no education beyond 7 years of elementary school) in 33 %, and intermediate in 27 %. The median income of the family was 70,000 Swedish crowns (\$ 16,000), range: 35,000–160,000 Swedish crowns (\$ 8,000–36,000, 1976). None of the men was unemployed. Fifty-nine per cent of their wives held an outside job. No family was in permanent need of social welfare. Of the families, 66 % were living in houses of their own, and 34 % were living in apartment houses. Thus, the sample can be regarded as reasonably representative of the average unbroken Swedish family of a small child. However, families with severe social difficulties were underrepresented.

Information from the man

All the men were interviewed by the first author (P.N.), a trained psychiatrist, who had no previous information about the family. The interview was semi-structured and the interview technique rather similar to that described by *Sears et al.* (1957). The interview, with few exceptions, took place in the home of the family. The length of the interview ranged from 1.15–3.0 h (median: 2 h).

The interview started with questions about the man's present and previous social situation. Thus, he was asked about his educational background, professional and economic situation, and whether he was satisfied with his present dwelling place. He was asked about relations with the neighbours and whether the family was cramped for space. In a similar way as above, the man's social situation during his formative years was investigated.

He was then encouraged to give a free description of his emotional relationship to his parents during his formative years. From this description, completed when necessary by direct questions, the man's contact with each of the parents was evaluated for childhood (up to 12 years) and adolescence (13–18 years). A good contact was noted when a close, open and warm relationship to the parent in question was reported. In contrast, poor contact was registered when the parent was described as distant or cool or when there had been more or less permanent conflict. If a man had been brought up by others than his biological parents, the parent-figure whom the man recognized as "the significant one" was regarded as "the father" or "the mother".

When the discussion about the man's emotional relationship to his parents was finished, a global assessment of the man's description of his father and mother, respectively, was made. When the positive feelings were the most prominent, the man's description of the parent was estimated as positive. In contrast, when the negative feelings seemed to dominate, the description of the parent was regarded as negative. When neither positive nor negative feelings seemed to dominate, an ambivalent attitude was noted. The man was also asked how he considered his parents' marriage. When the man reported that his parents often quarrelled and had not given each other emotional support, their marriage was estimated as disharmonious. Further, the man was asked if

Table 1. *Homogeneity of the scales: "Mental health in childhood" and "Mental health in adolescence"*

Mental symptoms in childhood ($n = 6$)	phi-value	Level of significance P
Mobbed	0.46	< 0.001
Nail-biter	0.40	< 0.01
Problems with teachers	0.36	< 0.01
Nervous	0.35	< 0.01
Fear of dark	0.33	< 0.01
Bed-wetter	0.26	< 0.05
Mental symptoms in adolescence ($n = 4$)		
Nervous	0.76	< 0.001
Authority problems	0.48	< 0.001
Truancy	0.44	< 0.001
Mobbed	0.38	< 0.01

his parents had suffered from mental disorder (psychosis, neurosis and problem drinking).

The man's relationship to his wife was also evaluated. He was asked to give his opinion about his marriage, what interests he and his wife had in common, and whether he was satisfied with the sexual relationship. Further, he was encouraged to give a free description of his wife. From this, as when estimating the man's description of his parents, the interviewer estimated how the man experienced his wife.

The relation between the man and his preschool child was assessed in different ways. The man was asked what the child signified for him, how he experienced the child's outbursts of temper, if the child was lively, craved attention, stubborn, whining, clinging, could not leave things alone, sensitive or anxious. From these topics, and others spontaneously brought up by the father, the interviewer estimated the man's description of his child as either positive, ambivalent or negative. When doing this it was taken for granted that the child meant both positive and negative things for the man. It was only when the negative feelings were more prominent or as strong as the positive ones that the man's description of his child was estimated as negative or ambivalent.

In order to get a rough estimation of how much the man had taken care of his child during its first year of life he was asked about different previously defined situations. For instance, he was asked about how often he had bathed his child, changed diapers, helped it during meals and put it to bed. For each of these four items, the man was allotted 0, 1 or 2 points. The more active the man had been the higher the points. This information was put together in a scale: "Early paternal caretaking" and the sample was divided into halves by means of an approximate median cut. As all the items were significantly correlated to the scale ($P < 0.001$, phi-values: 0.49–0.81), it was homogeneous. As a measure of how much the man took care of his child at the present time the

Table 2. *Homogeneity of the scale "Current mental health"*

Current mental symptoms	Dpk-value
Concentration difficulties	0.80
Low mood	0.78
Feelings of inferiority	0.69
Contact problems	0.67
Sense of fatigue	0.65
Tendency to compulsive behaviour	0.59
Sensitivity	0.53
Difficulties in relaxing	0.50
Sleep problems	0.50
Palpitations	0.50
Loss of control	0.47
Often tired	0.46
Sensitivity to criticism	0.41
Attacks of anxiety	0.36
Hypochondria	0.36
Fear of crowds	0.31

following two situations were considered: "How often did the father help the child during meals?" and "How often did the father put the child to bed?"

The man was also asked about his rearing method in different situations. His rearing attitude was estimated as "authoritarian" if he was limit-setting without paying much attention to the needs of the child, or "non-authoritarian" if he paid more attention to the needs of the child before setting limits. Occasional physical punishment, such as a box on the ear in affect, was not necessarily regarded as authoritarian.

The man's mental health in childhood and adolescence was rated by asking him if he had been troubled by certain mental symptoms (Table 1) during his childhood and adolescence. This information was put together in two scales: "Mental health in childhood" and "Mental health in adolescence". The number of affirmed symptoms for each man on each scale was assessed and the sample was divided into halves by an approximate median cut. As all the items included in the scales were significantly correlated with each other and with the total scales, the scales were regarded as homogeneous.

Current mental health was rated by asking the man about the presence of certain mental symptoms (Table 2), which were put together in a scale: "Current mental health". The number of affirmed symptoms was assessed and the sample was divided into halves by an approximate median cut. As no symptom had a Dpk-value below 0.30 (*Smith & Marke (1958)*) the scale was regarded as homogeneous.

The man was asked if his mental symptoms incapacitated him to such a degree that he experienced impaired efficiency in his daily activities. His consumption of sedatives and alcohol was estimated. He was also asked how often he had been sick-listed during the last 5 years and whether he had consulted a mental health professional.

When discussing the mental symptoms, the interviewer rated whether in his opinion the man showed signs of psychopathology (psychosis, neurosis, problem drinking and addiction to sedatives). At the end of the interview, the investigator gave an estimation of his contact with the man. If the man had been open during the interview, a good contact was noted.

Information from the woman

All information from the woman was independently collected by one of the investigators (N.U.) and centred around the same topics as in the men's interviews. A detailed description of this part of the investigation is given elsewhere (Uddenberg (1974, 1980)).

Information from the child

The projective play session. The child's perception of its father and mother was studied in a projective play session (Uddenberg & Englessen (1978, 1980), Uddenberg et al. (1979), Uddenberg (1980)). This was carried out in the home of the family by a child psychologist (I.E.) who had no previous information about the families. When alone with the psychologist, the child was invited to play with a doll's house, a mother-doll, a father-doll, a doll representing itself and a doll representing a younger sibling if there was any. After arranging the furniture, the child started playing with the dolls. A number of different situations representing an "ordinary day" were reproduced.

- A. The family members rise, dress and have breakfast.
- B. The child goes out to play.
- C. The members of the family have dinner together.
- D. The child breaks a valuable vase.
- E. The child goes to bed in the evening.
- F. The parents go out for the evening, leaving the child with a baby-sitter.

The child was encouraged to speak freely, but some standardized questions were posed (free Swedish translations from the Family Relation Test, FRT (Bene & Anthony (1957))).

Using both the free report and the replies to the standardized questions, the child psychologist (I.E.) made an overall assessment of how the child perceived its father and its mother. When doing this it was tried to estimate the relative strength of the positive and negative feelings. If one of these dominated, the child's perception of the parent in question was estimated as either positive or negative. When the positive and negative feelings seemed to be equally strong, the child's perception of the parent in question was estimated as ambivalent.

The intellectual development of the child. The logic-inductive ability of the child was estimated by Raven's Coloured Matrices (Raven (1966)). The child's ability to name pictures correctly, its vocabulary and spatial ability were estimated by sub-tests from the Swedish version of the Terman-Merrill Intelligence Test (Terman & Merrill (1947)).

Social maturity. When the examination of the child was finished, the child psy-

chologist made a global assessment of the child's behaviour as either mature or immature. The child was rated as immature when it behaved like a child younger than its chronological age. Special attention was paid to different aspects of the child's behaviour, such as the child's ability to concentrate on the tests and the way it contacted the child psychologist. A more detailed description of this measure is given elsewhere (Uddenberg (1980)).

Statistical methods

The man's report of mental symptoms above (≥ 4 spt.) and below (≤ 3 spt.) an approximate median was compared with other data from the investigation. The statistical significance of the observed distributions was estimated by calculating χ^2 -values. Yates' correction for discontinuity was employed when any expected value was below 5. When the total number of individuals was particularly low Fisher's exact probability was calculated. A distribution was considered statistically significant when the probability that it should be caused by chance was less than 5 % (two-tailed test). The relative strength of the different relations was estimated by calculating tetrachoric correlations (phi-values, Maxwell (1961)).

RESULTS

Frequency of mental disorder

Fourteen men (24 % of the total sample) were estimated as suffering from psychopathology of clinical significance. Thirteen of these men reported mental symptoms above the median. Thus, a strongly significant correlation was found between distinct signs of psychopathology and a high number of mental symptoms ($\chi^2 = 8.92$, $P < 0.01$, phi-value = 0.39). Of those men regarded as suffering from clinical psychopathology one man (1.7 % of the total sample) had been diagnosed as a schizophrenic in a mental hospital. Seven men (12 % of the total sample) reported moderate depressive symptoms such as lowered mood, anxiety and impaired working capacity. Three men (5 % of the total sample) reported anxiety-phobic reactions. Four men (7 % of the total sample), one of whom also reported moderate depressive symptoms, said that they had alcohol problems. None of the men was regarded as addicted to sedatives. It should be noted that our frequencies of mental disorder tally well with those expected in a Swedish normal population (Kringlen (1980)).

Comparisons between the man's number of current mental symptoms and other measures of his current mental health

The majority (53 %) of men with mental symptoms above the median reported that they sometimes felt incapacitated by their symptoms. In comparison only one fourth (25 %) of the men with mental symptoms below the median reported such incapacitation. The difference was significant on the 5 %-level ($\chi^2 = 4.53$, 1 df). There was also a tendency that men reporting mental symptoms above the median more often than others, had consulted a mental health professional (32 % compared with 17 %, N.S.). However, men reporting mental symptoms above the median had not been sick-listed more often than others.

Table 3. *Comparisons between the man's number of current mental symptoms and his emotional background (n = 58)*

	Number of current mental symptoms		Median cut
	Below median (n = 24)	Above median (n = 34)	
Earlier mental health			
Reported mental symptoms in childhood			
< median	18	14	$\chi^2 = 6.51$, 1 df, $P < 0.02$
> median	6	20	$\varphi = 0.34$
Reported mental symptoms in adolescence			
< median	17	15	$\chi^2 = 4.06$, 1 df, $P < 0.05$
> median	7	19	$\varphi = 0.26$
Man's father			
Father described			
pos.	14	8	$\chi^2 = 7.24$, 1 df, $P < 0.01$
amb./neg.	10	26	$\varphi = 0.35$
Contact with father in childhood			
good	15	10*	$\chi^2 = 5.85$, 1 df, $P < 0.02$
poor	9	23	$\varphi = 0.32$
Contact with father in adolescence			
good	19	15**	$\chi^2 = 6.00$, 1 df, $P < 0.02$
poor	5	17	$\varphi = 0.33$
Father having alcohol problems			
yes	1	7	$P = 0.20$
no	23	27	$\varphi = 0.18$
Man's mother			
Mother described			
pos.	18	17	$\chi^2 = 3.67$, 1 df, N.S.
amb./neg.	6	17	$\varphi = 0.25$
Contact with mother in childhood			
good	22	20	$\chi^2 = 7.60$, 1 df, $P < 0.01$
poor	2	14	$\varphi = 0.36$
Contact with mother in adolescence			
good	17	16	$\chi^2 = 3.24$, 1 df, N.S.
poor	7	18	$\varphi = 0.24$
Parental marriage			
Marriage of own parents			
harmonious	23	22***	$\chi^2 = 7.24$, 1 df, $P < 0.01$
disharmonious	1	11	$\varphi = 0.35$

* In one case there was no biological father in childhood, but a step-father from 11 years of age.

** In one of the cases the grandfather died when the man was 8 years old. In the other case the biological father died when the man was 12 years old.

*** In one case the man was mainly brought up by his grandparents and a mother who never established any new relationship to another man.

There was no association between the man's report of his number of mental symptoms and the interviewer's estimation of his contact with the man.

Table 4. Comparisons between the man's number of current mental symptoms and his relation to his wife (n = 58)

	Number of current mental symptoms		Median cut
	Below median (n = 24)	Above median (n = 34)	
Wife described			
os.	18	18	$\chi^2 = 2.90$, 1 df, N.S. $\varphi = 0.22$
amb./neg.	6	16	
Common interests with wife			
many	19	19	$\chi^2 = 3.38$, 1 df, N.S. $\varphi = 0.24$
few	5	15	
Man satisfied with present sexual relation- ship to his wife			
yes	4	6	$\chi^2 = 0.40$, 1 df, N.S. $\varphi = 0.08$
no	20	28	
Number of wife's current mental symptoms*			
< median	13	17	$\chi^2 = 0.10$, 1 df, N.S. $\varphi = 0.04$
> median	11	17	

* Investigator N. Uddenberg.

Table 5. Comparisons between the man's number of current mental symptoms and his relation to his child (n = 58)

	Number of current mental symptoms		Median cut
	Below median (n = 24)	Above median (n = 34)	
General description			
Child described			
pos.	20	23	$\chi^2 = 1.81$, 1 df, N.S. $\varphi = 0.18$
amb./neg.	4	11	
Participation in care of child			
Early paternal caretaking			
low (Q1-Q2)	7	20	$\chi^2 = 4.97$, 1 df, $P < 0.05$ $\varphi = 0.29$
high (Q3-Q4)	17	14	
Man often helping child during meals			
yes	17	16	$\chi^2 = 3.24$, 1 df, N.S. $\varphi = 0.24$
no	7	18	
Man often putting child to bed			
yes	16	15	$\chi^2 = 2.88$, 1 df, N.S. $\varphi = 0.22$
no	8	19	
Rearing attitude			
Child reared in authoritarian way			
yes	2	8	$\chi^2 = 1.34$, 1 df, N.S. $\varphi = 0.15$
no	22	26	
Man often using physical punishment			
yes	14	20	$\chi^2 = 0.001$, 1 df, N.S. $\varphi = 0.004$
no	10	14	

Table 6. *Comparisons between the man's number of current mental symptoms and his previous and present social situation (n = 58)*

	Number of current mental symptoms		Median cut
	Below median (n = 24)	Above median (n = 34)	
Educational level of parental home			
high/moderate	4	9	$\chi^2 = 0.78$, 1 df, N.S.
low	20	25	$\varphi = 0.12$
Educational level of the man			
high/moderate	17	22	$\chi^2 = 0.24$, 1 df, N.S.
low	7	12	$\varphi = 0.06$
Total family income			
$\leq 60,000$ Skr. (= \$ 13,000)	6	17*	$\chi^2 = 4.05$, 1 df, $P < 0.05$
$> 60,000$ Skr. (= \$ 13,000)	18	16	$\varphi = 0.26$
Man satisfied with job			
yes	20	22	$\chi^2 = 2.44$, 1 df, N.S.
no	4	12	$\varphi = 0.21$
Man satisfied with present dwelling place			
yes	21	22	$\chi^2 = 3.81$, 1 df, N.S.
no	3	12	$\varphi = 0.26$
Man thinks family cramped for space			
yes	9	22	$\chi^2 = 4.19$, 1 df, $P < 0.05$
no	15	12	$\varphi = 0.27$
Number of neighbour relationships			
many	11	4	$\chi^2 = 8.52$, 1 df, $P < 0.01$
few	13	30	$\varphi = 0.38$

* In one case the man did not want to give any information about the family's income.

Comparisons between the man's number of current mental symptoms and his emotional background (Table 3)

The current mental health of the man was related to his previous mental health. Thus, men reporting many mental symptoms more often than the others reported mental symptoms above the median during their childhood and adolescence.

Further, the man's current mental health was in many ways related to his emotional experience of his parents during his formative years. Thus, men reporting mental symptoms above the median more often than the others described their father in a negative way and their contact with him in childhood and adolescence as poor. Although not reaching a statistical significance, there was also a tendency that the fathers of the same men more often than the others had had alcohol problems during the man's formative years (21 % compared with 4 %, N.S.).

Also, the man's experiences of his mother were related to his mental health. Men reporting mental symptoms above the median more often than the others tended to describe their mother in a negative way. The same men also more

Table 7. Comparisons between the man's number of current mental symptoms and the child's perception of its parents in the projective play session, intelligence development and social maturity (n = 58)

	Number of current mental symptoms		Median cut
	Below median (n = 24)	Above median (n = 34)	
Child's perception of his/her parents in projective play session			
Child's perception of father			
pos.	10	18	$\chi^2 = 0.72$, 1 df, N.S. $\varphi = 0.11$
amb./neg.	14	16	
Child's perception of mother			
pos.	10	18	$\chi^2 = 0.72$, 1 df, N.S. $\varphi = 0.11$
amb./neg.	14	16	
Intellectual development of child			
Raven's coloured matrices			
> median	10	15	$\chi^2 = 0.03$, 1 df, N.S. $\varphi = 0.02$
< median	14	19	
Spatial ability*			
> median	13	12	$\chi^2 = 1.25$, 1 df, N.S. $\varphi = 0.15$
< median	11	22	
Picture naming*			
> median	13	17	$\chi^2 = 0.10$, 1 df, N.S. $\varphi = 0.04$
< median	11	17	
Vocabulary*			
> median	12	15	$\chi^2 = 0.20$, 1 df, N.S. $\varphi = 0.06$
< median	12	19	
Social maturity			
Child estimated mature	13	18	$\chi^2 = 0.05$, 1 df, N.S. $\varphi = 0.03$
Child estimated immature	11	16	

* Sub-test from the Swedish version of Terman-Merrill Intelligence Test (Terman-Merrill (1947)).

often than others reported a poor contact with their mother during their formative years. However, a report of poor contact with the mother in childhood was more strongly related to the man's current mental health than a report of poor contact with the mother in adolescence. Further, men reporting mental symptoms above the median more often than others, regarded their own parents' marriage as disharmonious.

Comparisons between the man's number of current mental symptoms and his relation to his wife (Table 4)

Nearly twice as many of the men reporting a high number of symptoms as of those reporting a low number of symptoms described their wife in an ambivalent or negative way (47 % compared with 25 %, N.S.). Men reporting many mental symptoms also tended to have fewer interests in common with their wives (44 % compared with 22 %, N.S.).

However, there was no association between the man's current mental health and his sexual relationship to his wife. There was also no association between the man's current mental health and his wife's current mental health as estimated by another investigator (N.U.).

Comparisons between the man's number of current mental symptoms and his relation to his child (Table 5)

An ambivalent or negative attitude towards the child was nearly twice as common in men reporting many mental symptoms as in men reporting few (32 % compared with 17 %, N.S.). Men reporting many mental symptoms had also been less active than the rest in the care of the child in infancy and tended to be less active in the care of the child at the time of the investigation. An authoritarian rearing attitude and use of physical punishment were not related to the man's current mental health.

Comparisons between the man's number of current mental symptoms and his previous and present social situation (Table 6)

The educational level of the man's parental home was not associated with the man's current mental health. Nor was the man's own educational level related to his mental health. However, men reporting many mental symptoms more often than the others had a low total family income ($= \leq 60,000$ Swedish crowns, 1976 = \$ 13,000). There was also a tendency that the same men were more often dissatisfied with their present dwelling. For instance, mental symptoms above the median were more often reported by men considering the family to be cramped for space and having few social relations with their neighbours.

Comparisons between the man's number of current mental symptoms and the child's perception of its parents in the projective play session, intelligence development and social maturity (Table 7)

There were no associations between the man's current mental health and the child's perception of its parents in the projective play session. Thus, children of men reporting many mental symptoms were not more negative or ambivalent towards their fathers than other children. The same was true, even when we studied children of fathers who suffered from psychopathology of clinical significance.

Further, the man's current mental health was not related to his child's performance on Raven's Coloured Matrices and the different sub-tests in the Swedish version of the Terman-Merrill Intelligence Test. Nor was the man's current mental health related to the social maturity of the child.

It might be expected that the mental health of the man should be of greater importance for the development of his son than of his daughter. Four and a half-year-old boys are at the beginning of a developmental phase, when identification with the father is considered to be of great importance (*A. Freud* (1937), *Mowrer* (1950), *Sears et al.* (1957), *Kagan* (1958, 1964)). However, when studying the boys and the girls in the sample separately, it was observed that the

correlations between the man's current mental health and the development of his son were equally low as that between the man's current mental health and the development of his daughter. The son's and the daughter's perception of their father was not significantly associated with the man's current mental health.

DISCUSSION

In this study mental health was defined by means of a homogeneous scale consisting of a wide range of different, common mental symptoms. Comparisons were made between one group of men with a number of mental symptoms above and one group of men with a number of mental symptoms below an approximate median. There are reasons to suspect that those reporting many mental symptoms were more mentally strained than those reporting few. For instance, 13 of the 14 men presenting a psychopathology of clinical significance belonged to the former group. Also, many of the men in this group had experienced at least a moderately impaired efficiency in their daily life. Somewhat surprisingly, however, the men reporting many symptoms had not been more often sick-listed than those reporting few. Consequently, when we study the men with a high number of mental symptoms, we are not dealing with a group of severely mentally handicapped men. It is possible, that our findings would have been different if we had compared such a group with a group of relatively healthy men.

The man's proneness to report mental symptoms may be regarded as one aspect of his willingness to admit problems. Hence, it is probable that men reporting many mental symptoms, in general are more problem-oriented. However, the interviewer's rating of the man's openness during the interview was not related to the number of mental symptoms reported by the man. Thus, a high number of mental symptoms was not only a reflection of an unspecific, open attitude.

Our observations that the man's experience of his parents and his mental health in childhood and adolescence were related to his current mental health are in accordance with the findings of other investigations (*Langner & Michael* (1963), *Vaillant* (1974)). These studies, like ours, were based on samples representing an average population.

There is evidence (*Hare & Shaw* (1965), *Hagnell & Kreitman* (1974), *Rutter et al.* (1977)) that the wives of men with psychiatric disorders tend to have depressive or neurotic disorders themselves. Both assortative mating and interaction have been suggested as explanations of these findings (*Rutter* (1977)). In the present study, however, there was no association between the number of mental symptoms reported by the man and the number of mental symptoms reported by his wife. However, there was a tendency that a high number of mental symptoms in the man was associated with a report of less satisfying relations to the wife. These findings can be compared with the findings of three American studies (*Langner & Michael* (1963), *Vaillant* (1974), *Heath* (1976)),

which, similar to our study, also found an association between the man's mental health and his relation to his wife.

The man's mental health has also been connected with his relation to his child (*Langner & Michael (1963), Vaillant (1974), Heath (1976)*). In the present study men reporting many mental symptoms more often than others, tended to experience their child in an ambivalent or negative way. The same men had also to a lesser extent participated in the care of the child. Thus, a moderate degree of poor mental health in the man seemed to be unfavourable for his engagement in the child. This can be compared with the finding of impaired mothering in depressed women (*Weissman et al. (1972)*).

However, there were no associations between the man's number of mental symptoms and the child's perception of him in the projective play session. Nor was the man's current mental health related to his child's social maturity and intellectual development. These findings probably depend on our sample, which only to a less extent included men with a long-standing mental disorder. They also support the observations of other investigators (*Buck & Laughton (1959), Kellner (1963), Hare & Shaw (1965), Wolff & Acton (1968), Rutter et al. (1975), Richman (1975)*) emphasizing the relative importance of the mother as compared with the father for the young child's emotional and intellectual development. In the Western culture, the mother is still the one who primarily cares for the child during its first years, whereas the father's engagement may increase with the age of the child. Thus, it is probable that the associations between the mental health of the father and the development of his child would have been more pronounced if we had studied older children. Boys especially, should be expected to be impaired in their development if the father's mental health is poor and the emotional relations insufficient (*Freud (1937), Mowrer (1950), Sears et al. (1957), Kagan (1958, 1964)*).

The man's mental health was also related to his social situation. Thus, men reporting many mental symptoms more often than others, were dissatisfied with their dwelling and their job. A low level of income was also more common in men reporting many mental symptoms. The latter finding is of special interest since earlier Swedish investigators in the fifties (*Jonsson & Kälvesten (1964)*) and in the sixties (*SOU (1970)*) have also found an association between poor mental health and a low level of income.

To sum up, the man's current mental health was in many ways related to both his past and present experiences. However, the man's early emotional experiences of his parents seemed to be of special importance. Thus, although it may be difficult to tell cause from consequence, the man's negative early experiences of his parents may be regarded as one early factor rendering him more susceptible to emotional and social stresses in adulthood. For instance, he may have difficulties in establishing a good relationship to his wife and children (e.g. *Nettelbladt et al. (1980)*). However, the fact that the father reported a number of mental symptoms above the median does not seem to negatively affect the development of his 4½-year-old child.

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Sex-role patterns, paternal rearing attitudes and child development in different social classes

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Sex-role patterns, the father's rearing attitude and the child's intellectual and emotional development in different social classes were studied in a randomly selected sample of 58 Swedish unbroken families of a small child. Working class men and women married younger and the women were more often house-wives. Working class men had more often been reared in an "authoritarian" way and more often reared their children in the same way. Upper middle class men had taken a more active part in the care of the child. Working class children scored lower on the intelligence tests, especially the verbal ones and were more often estimated as socially immature.

Key words: Social class – socioeconomic level – sex-role pattern – rearing attitude – child development – language development – socioemotional development.

At the turn of the century the parental roles in the Swedish middle class were clearly defined. The father's role was to provide economic support to the family, the mother's to take care of the children and run the house. In the Swedish working class the situation was different. Unemployment, poverty and overcrowding forced many working class women to share the economic obligations of the family with their husbands. However, as time went on, the standard of living in the working class improved and the house-wife was regarded as a symbol of prosperity.

Today the differentiation of the parental roles is less clear (NU, B (1979)). Usually, both parents work outside the home and the man is expected to participate in the care of the children and the household chores. However, even if both the man and the woman hold an outside job, it is often the woman who has the chief responsibility for the home (SOU (1978), SCB (1980)). Furthermore, the father's participation in the care of the children is related to the socioeconomic level of the family. The higher the socioeconomic level, the more the man participates in the care of the child.

A number of studies suggest a relationship between the socioeconomic level of the parents and their child-rearing attitude. For instance, *Sears et al.* (1957) found that middle class mothers were more permissive and less punitive towards their 5-year-old children than working class mothers. More recently, *Holter et al.* (1976) observed that middle class parents wanted their children to be independent, whereas working class parents wanted their children to be

more submissive. Further, Swedish investigators (*Jonsson & Kälvesten* (1964), *Jonsson* (1967, 1969), *Kärby* (1971)) have demonstrated that an "authoritarian" style of child rearing is more common in the working than in the middle class.

The socioeconomic level of the parents also has been related to the child's intellectual and emotional development. Thus, there are many studies (*Bayley & Schaeffer* (1960), *Bayley* (1967), *Kyng* (1974)) demonstrating that children of parents with a high education have higher scores on various intelligence tests than children of parents with a low education. Further, *Kyng* (1974) found that children of highly educated mothers tended to be more emotionally and socially mature than those of less well educated mothers.

The purpose of the present study was to investigate to what extent the sex-role pattern in the family, the father's rearing attitude and the child's intellectual and emotional development were related to socioeconomic differences in a randomly selected sample of 58 Swedish unbroken families of a small child.

SAMPLE AND METHODS

General characteristics of the sample

The present study is part of a broader longitudinal study of randomly selected Swedish families, which was carried out in order to elucidate psychological and social factors of importance for adaptation to parenthood and parent/child relations (*Uddenberg* (1974), *Uddenberg & Englessen* (1978, 1980), *Uddenberg et al.* (1979), *Nettelbladt et al.* (1980)).

In January 1976 – January 1977, 61 men were selected according to the following criteria:

- 1) Their wives had participated in the study and had been independently interviewed by one of the investigators (N.U.).
- 2) They were living together with their wives and children.

Only three men (5 %) refused to be interviewed. Thus, the investigated sample comprised 58 men who had their first child with the present partner about 4½ years ago. Three of the men had children with a previous partner.

The median age of the men was 31 years (range: 25–55 years), and the median age of their wives was 29 years (range: 25–37 years). The couple had lived together for a median time of 6 years (range: 4–11 years). The children were approximately 4½ years old (range: 3 years, 11 months–4 years, 8 months). The children comprised 31 boys and 27 girls. The majority of the children (72 %) had a younger sibling.

The educational level of the man was estimated as high, i.e. university studies in 40 % and as low, i.e. no education beyond 7 years of elementary school (= *folkskola*) in 33 %, and as moderate (= *studentexamen* $\approx$ higher school certificate or *realexamen* $\approx$ lower school certificate) in 27 %. The median income of the family was 70.000 Swedish crowns (= \$ 16.000, range: 35.000–160.000 Swedish crowns = \$ 8.000–36.000). None of the men was unemployed. Fifty-nine per cent of their wives held an outside job. No family was in permanent need of social welfare. Of the families, 66 % were living in houses of their own, and 34 % were living in apartment houses. Thus, the sample can

be regarded as reasonably representative of the average unbroken Swedish family of a small child. However, families with severe social difficulties were underrepresented, and highly educated men were overrepresented. As our purpose was to investigate different attitudes and child development in different social classes and not to study the absolute frequencies of certain phenomena, the skewness of the sample should not hamper our conclusions.

Information from the man

All the men were interviewed by the first author (P.N.). The interview was semi-structured and with few exceptions took place in the home of the family. The interview started with questions about the man's previous and present social situation. The man's emotional relations to his parents during his early years and the way he was reared ("authoritarian" or "non-authoritarian", see below) were penetrated. He was asked about his opinion of the marital relationship between his parents and if his parents had suffered from mental disorder.

The man also described his own marriage and his emotional relation to his child. The interviewer tried to estimate how much the man had participated in the care of the child. Further, he was asked about his rearing attitude. This was estimated as "authoritarian" when the man was limit-setting without paying much attention to the needs of the child. On the contrary, the way of rearing was said to be "non-authoritarian" when the man discussed or tried to explain to the child why it was not allowed to do a certain thing. Occasional corporal punishment (for instance a box on the ear in affect) was not necessarily regarded as "authoritarian".

The man's previous and present mental health as well as his consumption of alcohol and sedatives were rated at the end of the interview. A more detailed description of the interview with the man is given elsewhere (Nettelbladt & Uddenberg (1979), Nettelbladt et al. (1980, 1981)).

Information from the woman

All information from the women was independently collected by one of the investigators (N.U.) and centered around the same topics as the interviews with the man. (For a description of the sample of the women and the semi-structured interviews, see Uddenberg (1974, 1980)).

Information from the child

The projective play session. The child's perception of its father and mother was studied in a projective play session carried out in the home of the family by a child psychologist (I.E., Uddenberg & Engleson (1978, 1980), Uddenberg et al. (1979)). The child was invited to play with a doll's house, a mother-doll, a father-doll, a doll representing itself and a doll representing a younger sibling if there was any. A number of different situations representing an "ordinary day" were reproduced.

- A. The family members rise, dress and have breakfast.
- B. The child goes out to play.
- C. The members of the family have dinner together.

- D. The child breaks a valuable vase.
- E. The child goes to bed in the evening.
- F. The parents go out for the evening, leaving the child with a baby-sitter.

The child was encouraged to report freely, but some standardized questions were posed (free Swedish translations from the Family Relation Test, FRT, *Bene & Anthony* (1957)). For instance, the child was asked what would happen to the doll when the vase was broken. In this situation some of the children reported that the doll would be corporally punished. Using both the free report and the replies to the standardized questions, the child psychologist made an overall estimation of how the child perceived its father and its mother.

The intellectual development of the child. The logic-inductive ability of the child was estimated by Raven's Coloured Matrices (*Raven* (1966)). The child's ability to name pictures correctly, its vocabulary and spatial ability were estimated by subtests from the Swedish version of the Terman-Merrill Intelligence Test (*Terman & Merrill* (1947)).

Social maturity. When the examination of the child was finished, the child psychologist made a global estimation of the child's behaviour as mature or immature. The child was estimated as immature when it behaved like a child younger than its chronological age. Special attention was paid to different aspects of the child's behaviour such as the child's ability to concentrate on the tests and its way to contact the child psychologist. (For further information, see *Uddenberg* (1980)).

Statistical methods

The man's social class was compared with other data from the investigation. The statistical significance of the observed distributions was estimated by calculating χ^2 -values. Yates' correction for discontinuity was employed when any expected value was below 5. When the total number of individuals was particularly low Fisher's exact probability was calculated. χ^2 on the regression (χ^2_R , *Maxwell* (1961)) was calculated when the statistical significance of a pervading trend in the distribution was to be tested. A distribution was considered statistically significant when the probability that it should be caused by chance was less than 5 % (two-tailed test). The relative strength of the different relations was estimated by calculating tetrachoric correlations on four-field tables (*Siegel* (1956)).

RESULTS

The men were classified into three socioeconomic levels. The classification was based upon the man's profession, educational and income level (*Carlsson* (1959)). Thus, 18 men belonged to the upper middle class, 20 to the lower middle class and 20 to the working class.

Comparisons between the man's socioeconomic status and his social and emotional background

Working class and lower middle class men more often than others (88 % compared with 56 %, $\chi^2_c = 5.56$, 1 df, $P < 0.02$, $\varphi = 0.31$) had a father who had no education beyond 7 years of elementary school. On the other hand, the man's social class was not related to the educational level of his mother. Irrespectively of the man's social class the majority of the men's mothers (76 % of the total sample) had no education beyond 7 years of elementary school. In practice this meant that they had been house-wives during the man's childhood and adolescence. Further, working class men more often than others (35 % compared with 13 %, $\chi^2_c = 2.59$, 1 df, N.S.) tended to report that the economic conditions in their parental home had been poor.

The man's social class was not related to his report of his early emotional contact with his parents. Nor was the man's social class associated with the way he had experienced the marriage of his own parents. However, working class men more often than others (30 % compared with 5 %, $P = 0.01$) reported their father had alcohol problems. They also more often than others (65 % compared with 24 %, $\chi^2 = 9.50$, 1 df, $P < 0.01$, $\varphi = 0.40$) reported that they had been reared in an "authoritarian" way. There was, however, no relationship between the man's social class and his experience of corporal punishment.

Comparisons between the man's socioeconomic status and his marital conditions (Table 1)

Both working class men and women tended to be younger than others when the child was born. Working class men were more often married to women with moderate or low education. Further, working class women more often than others had no outside job when the investigation was made. There was also a tendency that the same women had worked less than half of the time since the birth of the child. On the other hand, the woman's satisfaction with her occupation, whether running the home or going out to work, was not related to the man's social class.

The man's description of his wife or his satisfaction with his sexual relation to her were not connected with his social class. Working class men, however, reported that they had fewer interests in common with their wives.

Comparisons between the man's socioeconomic status and his working and housing conditions (Table 2)

There were no associations between the man's social class and his satisfaction with his job. Nor was the man's social class associated with living in own house or an apartment. Further, men of different social classes were equally satisfied with their dwelling place. For instance, they were usually not cramped for space and they also had good contact with their neighbours.

Comparisons between the man's socioeconomic status and his previous and present mental health

The man's social class was not related to his current mental health or to his

Table 1. *Comparisons between the man's socioeconomic status and his marital conditions (n = 58)*

	Socioeconomic status of the man			
	Upper middle class (n = 18)	Lower middle class (n = 20)	Working class (n = 20)	Working class/rest
Educational level of man's wife				
high	13	6	2	$\chi^2 = 9.08, 1 \text{ d.f.}$
moderate or low	5	14	18	$P < 0.01, \varphi = 0.40$
				$\chi^2_R = 15.68, 1 \text{ d.f.}$
				$P < 0.001$
Age of man when child was born				
≤ 24 years	2	8	10	$\chi^2 = 3.25, 1 \text{ d.f.}$
> 24 years	16	12	10	N.S., $\varphi = 0.33$
				$\chi^2_R = 6.24, 1 \text{ d.f.}$
				$P < 0.02$
Age of wife when 1st child was born*				
≤ 20 years	1	3	6	$\chi^2_C = 2.25, 1 \text{ d.f.}$
> 21 years	17	17	14	N.S., $\varphi = 0.19$
				$\chi^2_R = 4.00, 1 \text{ d.f.}$
				$P < 0.05$
Wife working outside home at time of invest.*				
yes	15	12	5	$\chi^2 = 11.24, 1 \text{ d.f.}$
no	3	8	15	$P < 0.001, \varphi = 0.44$
				$\chi^2_R = 13.14, 1 \text{ d.f.}$
				$P < 0.001$
Wife worked outside home since birth of child*				
≤ 2.5 years	6	8	12	$\chi^2 = 2.84, 1 \text{ d.f.}$
> 2.5 years	12	12	8	N.S., $\varphi = 0.22$
				$\chi^2_R = 2.78, 1 \text{ d.f.}$
				N.S.
Wife satisfied with occupation*				
yes	14	13	11	$\chi^2 = 1.49, 1 \text{ d.f.}$
no	4	7	9	N.S., $\varphi = 0.16$
				$\chi^2_R = 2.16, 1 \text{ d.f.}$
				N.S.
Wife described				
pos.	13	12	11	$\chi^2 = 0.65, 1 \text{ d.f.}$
amb./neg.	5	8	9	N.S., $\varphi = 0.11$
				$\chi^2_R = 1.77, 1 \text{ d.f.}$
				N.S.
Man's sexual relation to wife				
satisfying	16	15	17	$\chi^2 = 0.10, 1 \text{ d.f.}$
not satisfying	2	5	3	N.S., $\varphi = 0.04$
				$\chi^2_R = 0.08, 1 \text{ d.f.}$
				N.S.
Common interests with wife				
many	14	16	8	$\chi^2 = 8.79, 1 \text{ d.f.}$
few	4	4	12	$P < 0.01, \varphi = 0.39$
				$\chi^2_R = 6.24, 1 \text{ d.f.}$
				$P < 0.02$

* Report of the woman (interviewer N.U.)

Table 2. *Comparisons between the man's socioeconomic status and his working and housing conditions (n = 58)*

	Socioeconomic status of the man			Working class/rest
	Upper middle class (n = 18)	Lower middle class (n = 20)	Working class (n = 20)	
Man satisfied with job				
yes	12	18	12	$\chi^2 = 2.35, 1 \text{ d.f.}$
no	6	2	8	N.S., $\varphi = 0.20$
				$\chi^2_R = 0.28, 1 \text{ d.f.}$
				N.S.
Family lives				
in own house	11	13	14	$\chi^2 = 0.27, 1 \text{ d.f.}$
in an apartment	7	7	6	N.S., $\varphi = 0.07$
				$\chi^2_R = 0.33, 1 \text{ d.f.}$
				N.S.
Man satisfied with dwelling place				
yes	13	16	14	$\chi^2 = 0.27, 1 \text{ d.f.}$
no	5	4	6	N.S., $\varphi = 0.07$
				$\chi^2_R = 0.03, 1 \text{ d.f.}$
				N.S.
Family cramped for space				
yes	9	10	12	$\chi^2 = 0.52, 1 \text{ d.f.}$
no	9	10	8	N.S., $\varphi = 0.10$
				$\chi^2_R = 0.40, 1 \text{ d.f.}$
				N.S.
Number of neighbour relationships				
many	4	6	5	$\chi^2 = 0.011, 1 \text{ d.f.}$
few	14	14	15	N.S., $\varphi = 0.01$
				$\chi^2_R = 0.03, 1 \text{ d.f.}$
				N.S.

mental health in childhood and adolescence. Nor were there any associations between the man's social class and his consumption of sedatives and alcohol.

Comparisons between the man's socioeconomic status and his own and his wife's attitude towards their child (Table 3)

There were no associations between the man's social class and his or his wife's general description of their child. Nor was the man's present participation in the care of the child related to his social class. However, upper middle class men had more often been active in taking care of the child during infancy (bathing, changing diapers, feeding and putting the baby to bed).

Working class men more often than others were rated as "authoritarian", but use of corporal punishment was not related to social class. However, women married to lower middle or working class men were less negative towards corporal punishment than women married to upper middle class men.

Table 3. *Comparisons between the man's socioeconomic status and his own and his wife's attitude towards their child (n = 58)*

	Socioeconomic status of the man			
	Upper middle class (n = 18)	Lower middle class (n = 20)	Working class (n = 20)	Working class/rest
Man				
General description of the child				
child described pos.	14	15	14	$\chi^2 = 0.27, 1 \text{ d.f.}$
child described amb./neg.	4	5	6	N.S. $\varphi = 0.07$ $\chi^2_R = 0.30, 1 \text{ d.f.}$ N.S.
Early paternal caretaking				
low-moderate (Q1-Q3)	7	16	17	upper middle class/rest
very high (Q4)	11	4	3	$\chi^2 = 11.03, 1 \text{ d.f.}$ $P < 0.001, \varphi = 0.44$ $\chi^2_R = 9.15, 1 \text{ d.f.}$ $P < 0.01$
Man often helping child during meals				
yes	12	12	9	$\chi^2 = 1.66, 1 \text{ d.f.}$
no	6	8	11	N.S., $\varphi = 0.17$ $\chi^2_R = 1.84, 1 \text{ d.f.}$ N.S.
Man often putting child to bed				
yes	9	12	10	$\chi^2 = 0.15, 1 \text{ d.f.}$
no	9	8	10	N.S., $\varphi = 0.05$ $\chi^2_R = 0.0005, 1 \text{ d.f.}$ N.S.
Rearing attitude				
Child reared in an authoritarian way				
yes	1	2	7	$\chi^2_C = 4.98, 1 \text{ d.f.}$
no	17	18	13	$P < 0.05, \varphi = 0.29$ $\chi^2_R = 5.91, 1 \text{ d.f.}$ $P < 0.02$
Man using corporal punishment				
yes	10	12	12	$\chi^2 = 0.024, 1 \text{ d.f.}$
no	8	8	8	N.S., $\varphi = 0.02$ $\chi^2_R = 0.07, 1 \text{ d.f.}$ N.S.
Wife*				
General description of the child				
child described pos.	16	17	15	$\chi^2_C = 0.59, 1 \text{ d.f.}$
child described amb./neg.	2	3	5	N.S., $\varphi = 0.10$ $\chi^2_R = 1.30, 1 \text{ d.f.}$ N.S.
Wife's opinion about corporal punishment				
pos./amb.	5	12	13	upper middle class/rest
neg.	13	8	7	$\chi^2 = 5.99, 1 \text{ d.f.}$ $P < 0.02, \varphi = 0.32$ $\chi^2_R = 5.12, 1 \text{ d.f.}$ $P < 0.05$

* Report of the woman (interviewer N.U.)

Table 4. Comparisons between the man's socioeconomic status and the child's perception of its parents in the projective play session, intelligence development and social maturity (n = 58)

	Socioeconomic status of the man			
	Upper middle class (n = 18)	Lower middle class (n = 20)	Working class (n = 20)	Working class/rest
Child's perception of his or her parents in the play session				
Child's perception of father				
pos.	8	8	12	$\chi^2 = 1.68, 1 \text{ d.f.}$
amb./neg.	10	12	8	N.S., $\varphi = 0.17$ $\chi^2_R = 0.97, 1 \text{ d.f.}$ N.S.
Child's perception of mother				
pos.	8	11	9	$\chi^2 = 0.13, 1 \text{ d.f.}$
amb./neg.	10	9	11	N.S., $\varphi = 0.05$ $\chi^2_R = 0.0001, 1 \text{ d.f.}$ N.S.
Child corporally punished when breaking vase				
yes	2	6	8	upper middle
no	16	14	12	class/rest $\chi^2 = 3.55, 1 \text{ d.f.}$ N.S., $\varphi = 0.25$ $\chi^2_R = 3.92, 1 \text{ d.f.}$ $P < 0.05$
Child's intelligence development				
Raven's Coloured Matrices				
> median	11	8	6	$\chi^2 = 2.13, 1 \text{ d.f.}$
< median	7	12	14	N.S., $\varphi = 0.19$ $\chi^2_R = 3.69, 1 \text{ d.f.}$ N.S.
Spatial ability*				
> median	10	9	6	$\chi^2 = 2.13, 1 \text{ d.f.}$
< median	8	11	14	N.S., $\varphi = 0.19$ $\chi^2_R = 2.54, 1 \text{ d.f.}$ N.S.
Picture naming test*				
> median	12	14	4	$\chi^2 = 12.30, 1 \text{ d.f.}$
< median	6	6	16	$P < 0.001, \varphi = 0.46$ $\chi^2_R = 8.62, 1 \text{ d.f.}$ $P < 0.01$
Vocabulary*				
> median	15	7	5	$\chi^2 = 5.70, 1 \text{ d.f.}$
< median	3	13	15	$P < 0.02, \varphi = 0.31$ $\chi^2_R = 12.66, 1 \text{ d.f.}$ $P < 0.001$
Social maturity				
Child estimated as mature	13	11	7	$\chi^2 = 4.17, 1 \text{ d.f.}$
Child estimated as immature	5	9	13	$P < 0.05, \varphi = 0.30$ $\chi^2_R = 5.29, 1 \text{ d.f.}$ $P < 0.05$

* Subtest from the Swedish version of the Terman-Merrill Intelligence Test (Terman & Merrill (1947))

Comparisons between the man's socioeconomic status and the child's perception of its parents in the projective play session, intelligence development and social maturity (Table 4)

The child psychologist's general rating of the child's perception of its parents was not connected with the man's social class. However, the higher the man's social class, the less often the child reported that it would be corporally punished when breaking the valuable vase.

Some of our measurements of the child's intelligence development and social maturity were associated with the man's social class. Thus, working class children more often than others scored below the median on Terman's Picture Naming Test and Vocabulary. Further, the lower the man's social class, the more often the child tended to score below the median on Raven's Coloured Matrices. However, the child's spatial ability (Terman) was not associated with the man's social class. Thus, the differences were more marked on the verbal than on the non-verbal tests. Also, working class children more often than others were estimated as socially immature for their age.

DISCUSSION

Working class men and women had been younger when the child was born. Since the birth of the child working class women had worked less outside the home than middle class women. When the child was 4½ years old, working class women were also more often house-wives (75 %), whereas the majority of the upper middle class women went out to work (83 %). Further, upper middle class men had participated more in the care of the child. The same men reported more interests in common with their wives. This may indicate that the interests were less sex-typed in the educated families. Taken together, our findings show that the sex-role patterns are more traditional in the working class, a finding corroborated by other investigators (*Eskola (1960), Gavron (1966), Nordhoek & Smith (1972), Holter et al. (1976), SOU (1978)*).

Both the report from the parents and the report from the children suggest that the general emotional relationship between parent and child was equally satisfying in the different social classes. However, children and parents agreed that the child-rearing patterns were less accommodative in the working class (*Chamberlain (1977, 1978)*). Further, working class men themselves had been reared in a more "authoritarian" way. Thus, specific child-rearing patterns in different social classes seem to be transmitted from generation to generation.

Our finding that working class men more often than middle class men had been reared in an "authoritarian" way and reared their own children in the same way is in agreement with many studies (*Sears et al. (1957), Jonsson & Kälvesten (1964), Jonsson (1967, 1969), Kärrby (1971), Holter et al. (1976)*). Differences in child-rearing patterns have been attributed to different relations of the social classes to the structure of society. For instance, *Kohn (1969)* has proposed that working class jobs demand that the worker submits to authority.

Probably, the man's social experiences are reflected in his way of socializing his child. Similarly, *McKinley* (1964) has argued that the lower the man's socioeconomic status, the more restrictive the way of child-rearing because conformity might give the working class child greater possibilities to adapt to its social circumstances.

Another reason for the different rearing attitudes between working and middle class men might be that our estimation of the man's rearing attitude emphasizes his tendency to reason with the child before setting limits. Middle class men, because of their higher educational level, might be more accustomed to discuss and motivate their actions.

Working class children scored significantly lower than middle class children on the verbal tests. Other investigators (*Rackstraw & Robinson* (1967), *Hawkins* (1969), *Henderson* (1970)) studying the language development of young children have found similar differences between middle and lower class children. As our own findings these studies support *Bernstein's* theory of speech codes (*Bernstein* (1971)), which suggests that middle class speakers tend to use an elaborated code, whereas lower class speakers use a more restricted code. In comparison with the elaborated code, the restricted code uses short and simple sentences and has a poor syntactic form. Our observations of social class differences in the language development of the children studied by us are compatible with this theory. Further, our observation that middle class fathers were more prone to use a "non-authoritarian" style of child-rearing is also in accordance with *Bernstein's* assumption of a more elaborated speech code in the middle class.

The design of our study does not allow us to decide to what extent genetic factors contribute to the different performances of children of various social groups in the tests. Further, verbal ability is not the only aspect of development. Other abilities, as for instance manual skill, are not measured by our tests.

Working class children more often than middle class children were estimated as socially immature. This may illustrate that the child's cognitive and emotional development cannot be regarded as two separate factors (*Piaget* (1971), *Beard* (1973)). Further, working class children more often having their mothers at home during the day, are probably more apprehensive when confronted with an unknown person, e.g. the child psychologist.

The present study shows the necessity of taking social class into account when studying family interaction styles and child development. However, complex phenomena as those investigated in this paper can only be fully understood within the framework of a multidimensional model.

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